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ABSTRACT

This evaluation attempts to measure the extent and effectiveness of ESEA Title I programs designed to meet the needs of disadvantaged children and apprizes the public and the legislature of program outcomes. In keeping with USOE requirements for evaluating Title I programs, this document is constructed of (1) responses to USOE probes by questionnaire sequence, (2) applicable supplementary or background information, and (3) available related findings. Data were collected from the Arizona State Department of Education; reaction reports from teachers, administrators, and State ESEA Title I personnel; onsite visitations by Title I staff; and evaluation supplement and narrative reports distributed to local educational agency Title I directors and activity directors. (EA)

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Annual Evaluation Report

TITLE I, ESEA

program activities

F.Y. 1970

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October, 1970

ARIZONA
Department of Education
W. P. Shofstall, Ph. D., Superintendent

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ELEMENTARY AND SECONDARY EDUCATION
ACT OF 1965 - TITLE I

TITLE I
STATE ANNUAL EVALUATION REPORT
FISCAL YEAR 1970

This report was filed with the U. S. Office of Education in partial fulfillment of the requirement of the Elementary and Secondary Education Act

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INTRODUCTION

The FY 70 Annual Evaluation Report presents evidence that E.S.E.A. Title I objectives are being met. The statistical findings supporting this statement will be found later in the body of this report. In all instances educators have expressed the belief that the individual programs have been of benefit to the educationally deprived children in their schools. Evidence tends to indicate that the aid to these children also allows a better program to be offered in the regular classrooms.

An evaluation has a different meaning to different persons and organizations. Each has a different interpretation as to what part of a program is to be evaluated. An auditor for example has a different viewpoint on this subject than does the educator. An educator is interested in the educational development of children. An auditor, on the other hand, thinks of the cost of that education. This report is presented by educators using the evaluation standards of educators.

MEANING OF EVALUATION

Evaluation may result in a judgement that a situation or an activity being considered is excellent and that the situation or activity should continue unchanged. ESEA Title I, however, exists because appraisal of educational achievement opportunity has resulted in a judgement that there are many educationally deprived children. Although each school and each school program is unique, the evaluation of Title I projects includes the following steps:

1. Identification of an educational need in terms of a deficiency, a gap in required competencies, or the absence of some desired behavior.

2. Definition of desired educational objectives to be achieved.

3. Determination of the educational experiences to be used to alleviate the deficiency or gap in competencies - to achieve the desired educational objectives.

4. Translation of the educational objectives into behaviors which will be displayed if the objectives are achieved.

5. Identification of situations in which the presence or absence of the designated behaviors can be observed and recorded.

6. Establishment of standards, norms, units which can be used to reveal absolute or relative amounts of the behavior displayed.

7. Selection of appropriate evaluation devices, and the application of the evaluation devices to the participants in the educational experiences.

8. Analysis of evidence yielded by the evaluation devices in terms of progress toward the defined objectives.

9. Drawing conclusions regarding effectiveness of the program in terms of the extent to which objectives were achieved.

10. Recommendations, including plans for further evaluation.

These steps in evaluation may be restated as questions:

1. Why is this program being implemented?
2. What will be done for the children participating in the program?
3. How much will be done for the children in the program?
4. What will the children be like or what will they be able to do as a result of the program?

FINDINGS

1. The greatest need of project children is improvement of reading.
2. The need that is second in importance is improved attitude toward self.
3. Teacher recommendation usually determined the children to be included in the Title I program.
4. Standardized test results also were used to identify children to be included in the program.
5. Secondary school counselor recommendation placed many secondary school children in the program.
6. Approximately 68% of Title I participants were in programs for improvement in reading.
7. More than 80% of the projects employed teacher aides. In excess of 1,000 aides were used.
8. Aides assisted very effectively.
9. Advisory Council members assisted in about half the projects in determining needs, defining objectives, and suggesting methods and activities.
10. Parents participated in conferences on needs and procedures.
11. Relations with non-public school participants were satisfactory.
12. Project information was disseminated by local reports and newspaper releases.

13. Operating expenditures, number of participants, and expenditure per participant are shown in the tables below.

a. Regular School Year Program and Regular and Summer Combined Programs.

	Operating Expenditures	Number of Participants	Expenditure Per Participant
Elementary & Cooperatives	$5,629,807	44,187	$128
Secondary	1,295,657	14,700	88
Total	$6,925,464	58,887	$118
b. Summer School Program			
Elementary & Cooperatives	$ 234,420	2,353	$ 89
Secondary	$ 36,112	690	52
Total	$ 270,532	3,043	$ 80
c. State Total	$7,195,996	61,9[illegible]	$116

Operating Expenditures

Elementary (Includes Cooperatives)

County	Expenditures	Number of Participants	Expenditure per Participant
Apache	$ 668,679	3,630	$185
Cochise	230,647	2,408	95
Coconino	411,309	2,186	188
Gila	101,027	1,078	94
Graham	98,009	769	127
Greenlee	21,128	240	88
Maricopa	2,312,386	15,425	149
Mohave	25,942	310	83
Navajo	518,970	2,940	176
Pima	725,814	11,776	62
Pinal	452,676	3,080	146
Santa Cruz	46,970	175	268
Yavapai	91,000	593	153
Yuma	159,670	1,930	69
Total	$ 5,864,227	46,540	$125

Secondary

County	Expenditures	Number of Participants	Expenditure per Participant
Apache	$ 28,114	335	$ 83
Cochise	9,886	105	94
Coconino	90,695	450	201
Gila	15,493	278	55
Graham	11,474	40	286
Greenlee	-0-	-0-	-0-
Maricopa	699,646	5,808	120
Mohave	-0-	-0-	-0-
Navajo	140,366	780	179
Pima	204,165	5,893	34
Pinal	87,542	917	95
Santa Cruz	3,238	63	51
Yavapai	7,835	81	96
Yuma	33,315	640	52
Total	$ 1,331,769	15,390	$ 86

Elementary & Secondary

Total	$ 7,195,996	61,930	$116

CONCLUSIONS

The conclusions below apply to ESEA Title I projects in the state.

The reader needs to know that Title I projects are funded only in areas in which there are many economically deprived children. It follows that the results are not typical of the state as a whole.

1. The greatest single need is improvement in reading. Improved reading was indicated as a need by 68% of the elementary and cooperative projects and secondary projects.

2. Need for improved speech was high on the list.

3. Project children need improvement in attitude toward themselves.

4. Insufficient use was made of standardized achievement test results.

5. Aides contributed effectively to Title I programs.

6. Summer schools benefited many of the educationally handicapped children.

7. Cooperation between public and non-public schools was satisfactory.

RECOMMENDATIONS

The final step in the evaluation process is making recommendations based on the conclusions resulting from the finding of the survey.

1. Project objectives should be few in number. Each objective should be specific.

2. Each objective should be stated in behavioral terms.

3. Expenditure of Title I funds should be made only for instructional and service activities designed to achieve specific objectives.

4. Each proposed program should describe plans for evaluation.

5. Each project should collect and report hard data as part of its evaluation.

6. Title I funds should provide better educational opportunities for the educationally handicapped children, not more of the same opportunities.

7. ESEA Title I funds should be concentrated on the most educationally deprived children. Arizona projects should select fewer children to participate in the Title I program.

DATA

NUMBER OF LEA's

The number of LEA's operating in the state of Arizona for the FY 70 were 293, with 180 operating Title I projects. Of these, 124 were regular school terms and 25 were summer. There were only 31 schools operating both summer and regular term projects.

PROGRAMS

Due primarily to a cut in the Title I allocation for FY 70, approved projects decreased to 180 from the FY 69 total of 184.

PUPILS

There were 61,989 students reported by the LEA's as educationally deprived. Of these, 57,896 were public school students while 4,093 were from private schools.

STAFF VISITS

The Title I staff made 180 visits to the LEA's during the FY 1970. The purpose of these visits were to evaluate the stated LEA program objectives with the operating program. As a result of these visits, recommendations for project changes were made; however, in many instances the LEA's recognized their own needs and corrected them.

These visits were extremely helpful to the Title I staff for advance planning for FY 71. The LEA's programs developed during the year were available to other LEA's for use in their proposed projects. Many have now reached a "sharing of experience" stage, which is a great saving in both finance and research throughout the State.

Evaluations by the State consultants were done on the spot and a written report filed with the director. These were screened, approved, and a copy was sent to the LEA together with plans for improvement or criticism. The main problem found was a great tendency for a general aid type program rather than a specific type for educationally deprived children. The LEA was advised to make all changes necessary to comply with the program.

The greater percent of the visits were for reading type programs, since they compose over 50% of the approved projects. About 20% were in the area of language art, the remainder scattered through other programs. Many of the programs were in the area of food, nutrition and health, and while requiring monitoring, did not need the careful check back as often as did the academic areas.

Title I has gone through departmental changes rather rapidly in the last three years. The director came to the Department in March of '70. The other consultants and professionals have been with the department only two or three months. A long range "look-back" is not possible from actual experience.

However, our records indicate several changes have been brought about: Among them are:

1. An increase in school visitations.
2. Closer supervision on the use and purchase of equipment.
3. Closer supervision on the use and duties of aides.
4. Better identification of the educationally deprived student.
5. Better working relations with local schools.
6. Better cooperation within the Department of Education itself.
7. Better and faster dispersal of allocations.
8. Closer evaluation of the use of Title I personnel on other departmental use.
9. More economical use of the administration money.
10. Assuring the schools that federal control will be kept at a minimum.

The Title I department has monitored each project as it was submitted and returned all that did not fit within the guidelines. After acceptance, the projects were monitored and changes if needed, were suggested. These are being made through project amendments constantly. The local schools realize they must present and maintain a good program.

Pressure is being kept on the schools to maintain a better program each year. They do this by:

1. Proposing better and more realistic programs each year.
2. Employing better qualified teachers.
3. More economic use of their equipment and finances.
4. A large range evolving and continuous educational program.

Non-public school children are assured of participation through the use of equipment, aides, and educational conferences. Parents of non-public children are now a part of many advisory boards. This is particularly true in the districts having non-public children in school. This year in Arizona all advisory boards serving in school districts having both Public and Private schools will have representation from the non-public parents. This will assure involvement of such parents in all Title I activities offered in the schools.

Modification of Title I programs is an on-going thing in Arizona. Encouragement is given to a district to change a program that is not meeting the most pressing educational needs. It is felt these projects are subject to modification if the local authorities feel they can assure a better means of educating the deprived child.

One example is a large school which had a high school dropout project. After three years, it was felt that the junior or senior age students could not be helped as much as a 7th or 8th grade one.

The school authorities and local advisory board decided to work with the younger student instead of the older, more calloused one. They felt that encouraging an early interest in vocational subjects for example would tend to hold these students in school. These same courses of study offered at the older age level were not as acceptable to the high school students. They expect to evaluate the results of this effort for at least three years; however, they feel this will hold more potential drop outs in school than did the first project. The consultants of Title I agreed this could well be an answer to this problem.

THE EFFECT UPON EDUCATIONAL ACHIEVEMENT

a. There have been many good educational effects upon the deprived children through the use of federal funds by the LEA's. Most notable have been the reading programs in about 68% of the participating schools. Many attempts were made by the LEA's to start such programs in the past but the money was not there at the local level. There were other programs involving the bi-lingual and language-art programs which could not have been offered by the LEA's without the aid of federal funds. The following statistical graphs from the FY 1969 reports are used to illustrate the progress. The FY 70 reports are not available at this time; however, since the same districts are involved in both years and the same type of children are involved, it is assured this will be acceptable as evidence of program effectiveness.

b. Common project characteristics which appear most effective in improving educational achievement are:

1. Regularity and the continuance of the program.

2. Teacher excellence in identifying with the youngster.

3. Early identification of the educationally deprived student and treatment of that deprivation.

4. Communication and cooperation of parent, teacher, and administration.

5. Constant and truthful dissemination of progress reports and other pertinent information.

6. Constant planning.

7. Community involvement.

It appears that larger districts having a larger budget have more effective programs than districts with smaller budgets. This is the consultant's observation; however, the school personnel and community seem to be more enthusiastic about federal programs in these larger districts than in the smaller. It is true most of the larger districts in this state have more poverty and educationally deprived children enrolled. Therefore, they are receiving a larger financial allocation.

THE ADMINISTRATIVE STRUCTURE

The Administrative Structure of our state agency has a director and consultants to operate the programs. The structure has not been changed from the approved state plan. The director is responsible to the state superintendent and his immediate assistants.

The Administrative Structure of the local districts in most cases, has not been affected as much as it could have been. Most large school districts have added a federal coordinator but the smaller districts have only added a secretary to keep federal accounts.

Some exchange of professional planning and services between public and private schools has developed through sharing of staff such as counselors and reading specialists and curriculum guides, teaching materials and shared activities; however, very little change in administrative structure in non-public schools has come about.

ADDITIONAL EFFORTS TO HELP THE DISADVANTAGED

a. Title I funds were not augmented by state funds in Arizona. All Title I programs were either new to the school district or were continuations of past programs. Compensatory programs held in various districts were not evaluated by the Title I staff since they were considered a part of the regular school program.

b. The program which is most often mentioned in Arizona as an example of coordination between titles is Somerton. This program is aided by both Title I and migrant funds. This is a reading-learning situation, involving Spanish-speaking, Mexican-American, migrant worker children. In the past three years, the "Somerton Story" has received national recognition. Title I is involved through the teacher aide program which is quite successful.

Other programs are located on the Indian Reservation where the Library Title II, and N.D.E.A. Title III funds are used to provide books and materials while Title I funds are again used for special teachers (subject areas) and aides.

These projects are located at Chinle, Tuba City, Kayenta, and Window Rock. There are numerous schools in Arizona that have similar programs.

SUCCESS OF TITLE I's COMPENSATORY PROGRAM

In order to evaluate the Title I's success, one needs to realize that Arizona is a state with a low tax base and a rapidly increasing population. These two factors, plus a deep-seated concern regarding Federal control of schools have presented some problems. Actually, without federal funds, the majority of experimental projects and their teaching staffs could not exist. Title I, through continuing projects has enabled the various districts to aid the educationally deprived students with special classes, teachers and remedial programs.

In Arizona last year, there were 293 projects. The quality of these programs improves each year. This is due to closer supervision and a feeling of mutual cooperation between the school district and the Title I office. There is a desire to expand and improve that is noticeable at the State and local level.

The majority of the projects are offered during the regular school term. This enables the student to be with peer groups as much as possible. Also, it is not identified as a "special" class.

Most school districts now accept the fact that eligible non-public students deserve as much help educationally, as the public school student. There is a strong indication that public schools are willing to give the non-public schools the same value in aid, aides, materials, etc. as they are giving their own students. They are insisting on non-public school persons becoming a part of their advisory councils, planning groups, and community projects. This has become very apparent in FY 70.

In FY 70 there were very few programs for the specific training of teachers and aides. Most of the aides had been with the program for several years and knew their duties. There is a very strong indication that the aides desire to attend regular faculty meetings and scheduled teacher's meetings within the State. Most districts encourage this feeling of professionalism.

COMMUNITY AND PARENT INVOLVEMENT

Arizona has always tried to work with community groups. In many cases the only way a project could be proposed to the local board was through community groups requesting such a program. Each LEA has come to expect more from the community in the way of advice and project involvement. In the beginning local community effort consisted mostly of volunteer help and some aides. Mothers would help on field trips and other occasions such as programs, etc. They have proven to be quite useful.

This year there will be LEA advisory board meetings at regular intervals, keeping minutes, and advising the school administration on all programs involving Title I funds. This has kept the parent informed of the educational goals of the school, but has presented some problems. Giving up complete control of the project was a difficult move by the school administrator. It was equally hard for the parent to become courageous enough to offer suggestions to professional teachers.

The educators have profited by becoming better acquainted with the parents, their background, and plans for their children. It was surprising to some to note the similarity in goals expressed by parents and teachers.

Local communities have been helped by this sharing of goals through increased interest in school building programs and broader educational offerings. Among the notable examples Statewide, is the increased interest in vocational education at both the high school and the junior college level. Both parent and educator are more aware than ever before that all students are not college material. Therefore, they must be educated for a worthwhile trade in order to take a place in a working society. Title I projects will become more involved in this type program in order to assure all students the training and education necessary to qualify for these terminal and technical schools.

The two schools selected with reading projects are as follows.

Amphitheater Elementary School District's #10 project which represents an effective reading project in a large urban school district. Gilbert Elementary School's #41 project which is representative of an effective reading project for a small non-urban school district. Both schools have had Title I projects since 1966. Both schools have included plans for active involvement of classroom teachers and supportive services available as reinforcement for Title I services.

CONTACT PERSON

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TITLE OF PROJECT

Project to Diminish Impediments to Learning

INITIATION OF PROJECT

Project was initiated in 1966 and continued through FY 70.

PROJECT TERMINATION

Project being continued in FY 71

OBJECTIVES OF PROJECT

a. Assist all teachers in recognizing reading difficulties in children and in making timely referrals to the school reading specialists.

b. Provide a diagnosis of reading difficulties so that remedial assistance may be given in the reading center and by the regular classroom teachers.

c. Provide the learning experiences which will help children overcome their difficulties.

d. Make referrals to health agencies and psychological agencies in Tucson after consultation with parents whenever the diagnosis indicates a learning difficulty beyond the scope of the reading center.

PROGRAM DESCRIPTION

Children from grades one through six in Prince Elementary School and Wetmore Elementary School will be served directly by the Title I reading specialists. Children in grades seven and eight in Amphitheater Junior High School will be served by the reading center's teacher in that school. Similar services will be provided by teachers in Nash Elementary School and Rillito Special Education School, though the teachers in these two reading centers will not be on Title I salaries. Since a considerable number of the children in Redeemer Lutheran School and in Sacred Heart School live in Amphitheater District, a one-half time teacher serves the children who are referred to her.

The teachers and principals of the Title I Project schools feel that diagnosis of learning difficulties and clinical improvement of these children continues to be the primary need. The advisory committee concurred and several members spoke specifically concerning the improvement of learning abilities and attitudes of their children who had been aided by the Title I Project. If our district can incorporate more of this diagnosis and teaching into the regular school programs, we expect in the future to turn attention to other problems of these educationally deprived children.

There were 4,919 children in grades 1-8 residing in our district in June of this year, according to our district attendance figures. The low-income resident children total 2,807. This includes children in the parochial schools and in those elementary schools which serve a fringe area, although no teacher is paid from Title I funds. We estimate that there will be 163 children served in our public schools and an additional 26 in the two parochial schools.

IN-SERVICE EDUCATION

Our in-service education for Title I staff members has been conducted primarily by the district reading consultant. There is no cost charged against the Title I Project for in-service education and supervision of the reading centers.

Individual conferences with parents of children referred to the reading centers help to acquaint parents with the difficulties being experienced by their children. A cooperative effort enhances the chances of improvement in learning by the child. No Title I funds are allocated for this parental involvement. Parents also are on the advisory committee which reviews and helps to plan the Title I activities.

As part of the diagnosis of learning difficulties, children will be given a reading inventory test and standardized reading tests. These same tests will be administered after a period of remedial training to determine the increase in their reading abilities. While it is difficult to collect group data, the individual scores have shown significant increases in abilities. The improved accomplishments in regular class work as evidenced by grades and by teachers' informal evaluations give further measures of the reading center results.

The cost of this evaluation is included in the instructional materials.

No publications are produced to disseminate the results from our reading centers. Reports are made to the advisory committee and to the Board of Education during the school year. No expenditures of Title I funds are needed for these reports.

Equipment for the reading centers was purchased in 1966 when our Title I project had its beginning. No expenditures for equipment from Title I funds will be made this year.

STAFF

The staff consists of four teachers with an average of thirty hours above their M. A. degree. Past teaching experience includes primary, kindergarten, special education, music, and clinical reading. Each teacher has taught remedial reading classes for the past five years.

Duties of the staff included teaching remedial reading, presenting classroom demonstrations, preparing reading inventories for use district wide, screening and evaluating new reading materials, testing new students, participating in in-service programs, providing resource materials, and conferring with parents and teachers.

PARTICIPANTS

Students were selected for reading classes on the basis of need and potential. As a general rule, they tested two or more years below grade level on standardized test scores. However, grade levels were disregarded in grouping for instruction. Students were grouped according to need with continuous diagnosis and evaluation. Class size ranged from two to ten students according to need or reading level. The students selected ranged in age from seven to thirteen years and were from grades two to eight. Achievement levels ranged from readiness through fifth grade. The majority of the students were male.

TEACHING TECHNIQUES

Reading teachers are aware that there is no one way to teach all children to read. Different methods, alone or in combination, work with different children. Listed below are some of the teaching techniques and materials and equipment used by the reading teachers in Amphitheater Reading Centers with individuals or with groups of students.

Diagnosis (Individual diagnosis employed for needed skill development)
Individualized reading
Directed reading lesson
Fernald (Tracing Techniques)
Tapes (Teacher made Basic Sight Words)
Specific Skills (Main idea, Using context, Drawing conclusions, Following directions and Working with sounds)
Language experience
Auditory discrimination techniques
Speech, corrective

EQUIPMENT AND MATERIALS

Tapes (EDL, Imperial, Teacher-made)
Overhead projector
Filmstrips
Tape Recorder
Films
Labs (Reading, Word, Webster, Peabody, Tactics, R.F.U.)

Programmed Materials
    Sullivan
Flash cards
Basal and Supplementary readers
Individualized Reading Labs
Classroom Libraries
Booths in Jr. High (Study Carrols)
High Interest Books
Many word and skill games
Controlled Reader
Tach - X
Reader's Digest Skill Builders
Worksheets
Audio and Visual Development
Listening Centers

EVALUATION

Classroom teachers have expressed appreciation for assistance given by the reading teachers. They have increased the use of diagnostic procedures with students and have improved their ability and willingness to "take the child from where he is" in reading. Junior high school teachers are using reading techniques in teaching content subjects.

A positive self-concept and self-motivation are desirable goals for all students. They are especially appropriate for students in grades three to eight who have experienced reading difficulties and reading failure. Students in the reading classes have evidenced improved attitudes toward reading and learning in general. Equally important are the records of improved reading ability as shown by standardized test results below.

Grade 3 - Prince and Wetmore Schools

Test Used: Gates-Mc Ginitie Reading Test

Project Pupil Data

	Pre-Test Form A-1		Post Test Form A-2	
Date Administered	October		May	
Number tested	38		38 (3 incomplete)	
Mean (Grade Equiv.)	Pre-Word Recog. 2.1	Post-Word Recog. 2.7	Pre-Par Mng. 1.9	Post-Par Mng. 2.6
National Norms (Grade Equiv.)	3.2	3.9	3.2	3.9

Grade 4 - Prince and Wetmore Schools

Test Used: Gates-Mc Ginitie Reading Test

Project Pupil Data

	Pre-Test Form A-1		Post Test Form A-2	
Date Administered	October		May	
Number tested	23		23 (5 incomplete)	
Mean (Grade Equiv.)	Pre-Word Recog. 2.7	Post-Word Recog. 3.8	Pre-Par Mng. 2.6	Post-Par Mng. 3.7
National Norms (Grade Equiv.)	4.2	4.9	4.2	4.9

Grade 5 Prince and Wetmore Schools

Test Used: Gates-Mc Ginitie Reading Test

Project Pupil Data

	Pre-Test Form B-1	Post Test Form B-2
Date administered	October	May
Number tested	13	13 (5 incomplete)

Mean (Grade Equiv.)	Pre-Word Recog.	Post-Word Recog.	Pre Par. Mng.	Post-Par. Mng.
	3.4	4.2	3.1	4.2
National Norms (Grade Equiv.)	5.1	5.9	5.1	5.9

Grade 6 Prince and Wetmore Schools

Test Used: Gates-Mc Ginitie Reading Test

Project Pupil Data

	Pre-Test Form B-1	Post Test Form B-2
Date administered	October	May
Number tested	9	9 (2 incomplete)

Mean (Grade Equiv.)	Pre-Word Recog.	Post-Word Recog.	Pre-Par. Mng.	Post-Par Mng.
	5.2	6.1	4.1	6.0
National Norms (Grade Equiv.)	6.1	6.9	6.1	6.9

Grade 7 Amphitheater Jr. High School

Test Used: Gates-Mc Ginitie Reading Test

Project Pupil Data

	Pre-Test Form C-1	Post Test Form C-2
Date administered	October	May
Number tested	22	22 (one incomplete)

Mean (Grade Equiv.)	Pre-Total	Post-Total
	4.1	6.2
National Norms (Grade Equiv.)	7.1	7.9

Grade 8 Amphitheater Jr. High School

Test Used: Gates-Mc Ginitie Reading Test

Project Pupil Data

	Pre-Test Form C-1	Post Test Form C-2
Date administered	October	May
Number tested	8	8
Mean (Grade Equiv.)	Pre-Total 5.1	Post-Total 6.7
National Norms (Grade Equiv.)	8.1	8.9

Grade 8 Amphitheater Jr. High School

Test Used: California Reading Test (1957 ed. 1963 norms)

Project Pupil Data

	Pre-Test Form X	Post Test Form Y
Date administered	October	May
Number tested	19	19 (2 other tests and incomplete)
Mean (Grade Equiv.)	Pre-Total 5.2	Post-Total 6.2
National Norms (Grade Equiv.)	8.2	8.9

Grade 2 Redeemer Lutheran School

Test Used: Gates-Mc Ginitie Reading Test

Project Pupil Data

	Pre-Test Form A-1		Post Test Form A-2	
Date administered	October		May	
Number tested	1		1	
Mean (Grade Equiv.)	Pre-Word Recog. 1.4	Post-Word Recog. 2.2	Pre-Par Mng. 1.7	Post-Par Mng. 2.4
National Norms (Grade Equiv.)	2.1	2.9	2.1	2.9

Grade 3 Sacred Heart School

Test Used: Gates Mc Ginitie Reading Test

Project Pupil Data

	Pre-Test Form A-1		Post Test Form A-2	
Date administered	October		May	
Number tested	9		9	
Mean (Grade Equiv.)	Pre-Word Recog. 1.2	Post-Word Recog. 2.7	Pre-Par Mng. 1.3	Post Par Mng. 2.5
National Norms (Grade Equiv.)	3.1	3.9	3.1	3.9

Grade 4 Sacred Heart School (7) - Redeemer Lutheran School (2)

Test Used: Gates-Mc Ginitie Reading Test

Project Pupil Data

	Pre-Test Form A-1		Post Test Form A-2	
Date administered	October		May	
Number tested	9		9	
Mean (Grade Equiv.)	Pre-Word Recog. 2.6	Post-Word Recog. 4.1	Pre-Par Mng. 2.4	Post Par Mng. 3.7
National Norms (Grade Equiv.)	4.1	4.9	4.1	4.9

Grade 7 Redeemer Lutheran School

Test Used: Gates-Mc Ginitie Reading Test

Project Pupil Data

	Pre-Test Form C-1		Post Test Form C-2	
Date administered	October		May	
Number tested	3		3	
Mean (Grade Equiv.)	Pre-Word Recog. 4.5	Post-Word Recog. 5.7	Pre-Par Mng. 4.5	Post-Par Mng. 5.8
National Norms (Grade Equiv.)	7.1	7.9	7.1	7.9

Gilbert Elementary School's #41 project is representative of an effective reading project for a small non-urban school district.

The Gilbert Elementary School's Title I Reading projects have progressed from remedial reading to prevention of reading failure. The original project, "I Can Do" 1966, entailed taking students from the regular classroom into special classes for a period of about twelve weeks. The 1969-70 as well as 1970-1971 projects aim at keeping the student in his regular classroom, except for brief (15-20 minutes) daily sessions in the reading center. The regular primary classroom enrollment is kept at twenty-five students or less. The teachers of these classes are provided materials and equipment with which to meet the special needs of the educationally deprived youngsters. The cooperative planning and the combined activities of administrators, classroom teachers, the reading teacher, school nurse, and part-time psychologist have resulted in an effective program for prevention of reading failure.

A Title I Consultant reported on February 6th, 1970, that this Title I project was operating according to 89-10 laws, was serving the needs of the Title I pupils, and was especially effective because the entire school was re-enforcing the efforts of the Title I personnel.

CONTACT PERSON

Jasper E. Cowart, Superintendent
175 West Elliott
Gilbert, Arizona 85234

TITLE OF PROJECT

Improvement of Reading Program for the Underachiever

INITIATION OF PROJECT

The FY 70 project is a variation of a Title I project initiated in 1966.

PROJECT TERMINATION

Title I project in operation through FY 71.

OBJECTIVES OF PROJECT

1. Prevent reading difficulties in the first grade.
2. Treat reading problems in grades two and three.
3. Develop an improved self-concept in these youngsters.

STAFF

A reading teacher with an Arizona certified elementary certificate, M. A. degree, and currently working to fulfill final requirements for Reading Specialist Stamp, a bi-lingual aide adept at assisting classroom teachers, and 1/12 FTE services of a psychologist, make up the staff.

PROGRAM DESCRIPTION

For the 1969-70 school year, we revised our Title I program from one of remediation to an extensive preventative program for the educationally deprived children of our district. From our experiences in the previous programs, we have the use of a variety of techniques leading to intensified motivation of the students involved. We believe that if this motivation is maintained, we will be able to prevent our students from becoming underachievers. Therefore, we plan to use our regular classroom teachers as an integral part of our program and with funds available through Title I, we will be able to provide a greater variety of experiences to achieve motivation of the students. We will use a special teacher in the reading program to reach the students who need even more attention.

It is the considered opinion of the teachers and administrators of the Gilbert Elementary School that this intensified effort in our primary grades will eliminate the great need for remediation in the intermediate grades. We are aware that those students who are below average in intelligence will achieve in a very limited way; however, as long as they are making progress commensurate with their ability, they can in no way be classified as underachievers.

We submit that we must make some fine line distinctions between our Title I students and non-Title I students; however, we have a portion of Title I students (economic classification) who will be able to perform capably with our non-Title I students.

The organization of our classroom will account for the special needs of students in Title I through the process of grouping within the classroom. The identification of the Title I student group will only be known to the teacher. The objectives for this group will be limited because of the necessity for thorough and repeated presentations of the programs. In this situation, the teacher will use the equipment and materials required to clarify and extend each objective in order to achieve mastery. In addition to such presentations, many of the students will spend an extra period (15-20 minutes) with the special reading teacher.

The idea of such a program is not new; however, school districts have never been able to fund programs of this nature because of the high per pupil costs. By making this proposed program an integral part of the regular school program, the teachers will be relieved of the frustration of not having the necessary materials and equipment required to place the student in an environment which is stimulating to him. Materials will range from the specific examples to the abstract examples and will be repeated as necessary to help the student see the relationships between concrete and abstract reasoning. This program will rely heavily on group interaction which will help the student in communicating his ideas in English. This is one of the needs of our Title I students.

We have the assurance of the Parent Advisory Committee that they will make every effort to provide voluntary help from parents of our students, not solely parents of children in Title I. Through parent involvement, the student gains a better home relationship which will aid him greatly in achieving a more positive self-concept. This in turn will make a better student.

FINAL REPORT: READING TEACHER (ORGANIZATION)

The Federally funded reading program for the Gilbert Elementary School was begun on November 1, 1969 in the reading center. The facilities were excellent in this very attractive classroom cottage and contributed to the overall success of the program. During the 27 weeks of this program, 102 students in grades one, two, and three have been instructed in the reading center. Twelve periods each day were scheduled. Each period was twenty minutes long. Individual differences were a factor in placement. In order to make the most effective use of the short instructional time, placement was done on a reading level basis. This was frequently a crossing of grade levels. The 20 minute periods were used in order that each child could come to the reading center each day. Placement in the program was kept flexible. When growth occurred, the students progressed to more advanced groups.

PURPOSE

The general purpose of the Gilbert Reading Program was to prevent and treat reading problems in the first three grades. Children showing a potential reading deficiency in the first grade were referred. Students in the second and third grades who were reading below their potential were also referred. Each student received direct instruction in reading skills, either individually or in small groups, for 20 minutes each day.

A second purpose of the program was to develop an improved self-concept in these same youngsters. Their inability to do grade level work often placed them in a threatening situation. Our purpose was to show the students that they can make useful contributions to society, in the classroom and school life in general. Immediate success was stressed in all activities of the reading class. Praise and other reinforcement was used to give the students confidence.

PROCEDURE

Initial referrals were done by the classroom teacher. An individual conference was then scheduled with the reading teacher and the student. At this time, the Wepman Auditory Discrimination Test and the Peabody I. Q. Test were administered. Detroit Visual Tracking was also used with the second and third graders. Visual and/or auditory problems noted at this time were referred to the school nurse. An informal reading test was also administered during the conference. This data was then studied by the reading teacher and a starting level for each child was determined.

Following the initial contact with each student, groups were formed composed of six to eight children who were performing on about the same level.

Grade placement was not a factor in grouping, and youngsters were not forced to work at grade level until they were prepared. The atmosphere of the reading center was essentially non-graded. As a student showed progress, he or she moved to more advanced groups. Conversely, if progress was not made, students could be moved into a slower group.

Problems outside the realm of actual reading disabilities were discussed with the classroom teacher and then referred to the school nurse. The nurse arranged for clothing, medical treatment, and psychological testing. She also checked visual and auditory problems and referred these to parents when necessary.

MATERIALS

Very few new materials were ordered for the special reading center. Consumable materials such as paper, pencils, and crayons were available in the room. A tape recorder and listening post and film strip projector were in the Title I room. Two pieces of new equipment were purchased for the reading center, a record player and an overhead projector. Word games, phonics materials, and other instructional aides already in the room were incorporated in the reading program. Supplementary basal textbooks were gathered from classrooms by the reading teacher. A permanent room collection of library books was put in the reading center. There were approximately 130 books and these were widely used and circulated.

In May, additional funds were made available and some new materials were ordered. These included several teaching aids for alphabet training, large and small colored pictures for vocabulary building, a large flannel board with telescoping stand, taped lessons on speech sounds, and flannel board materials in phonics and story-telling. Several supplementary basal readers were also ordered. The physical environment was enhanced by a new horseshoe shaped table for group instruction.

SPECIFIC INSTRUCTIONAL METHODS

In keeping with the purpose of the reading program, many and varied methods of instruction were employed. In order to prevent reading problems, it is necessary to create an interest in the printed word. Motivational techniques were combined with instruction at all levels. Listed below are some of the most successful experiences which worked in the reading center:

1. Use of the tape recorder

    a. Interview Type Situation at First Encounter. Later they were encouraged to read into the mike and then listen to their voices. Many strengths and weaknesses can be noted by both students and teacher. A periodic use of the tape recorder showed progress in oral reading skills.

    b. Stories were taped by the teacher to be used at the listening post by one or two students. The book was always available so the students could follow the story and pictures.

2. Word Books - Personal dictionaries were made by the second and third graders. Words listed in the books alphabetically included the Dolch Basic Sight Words and other special words they used in creative writing.

3. Experience Pictures - First graders particularly enjoyed drawing pictures and telling the teacher about the picture. Their comments were written simply on the picture and they were encouraged to read these statements about their picture.

4. Experience Stories - Second and third graders were encouraged to write down their experiences in school and at home. The concept of Key Vocabulary development was used in these experience stories. Key Words - Special interest words - were written on large cards for each child. These cards are reviewed periodically to strengthen their vocabulary and interest in new words.

5. Film Strips - Used with dialogue read by teacher or with professional recordings of the script. Film strips were helpful in teaching sequence and looking for details. Verbal training was encouraged in retelling stories.

6. Sight Vocabulary Development

   a. Elicited from experience

   b. Imposed by use of Dolch Basic Sight Words

7. Use of Newspapers

   a. Comic section was used for teaching sequence. Comic strips were cut apart and mounted on construction paper. Pictures were numbered on the back, in proper order. This became a self-teaching experience as they put the pictures in order.

   b. Teaching service words - use . the editorial page and having the students circle words they ? d such as and, with, this, and so on.

8. Reading Contests - using library books and charts to show progress. This was particularly stimulating to the older youngsters.

9. Alphabet Training - Each child had a set of cards with letters on them. Teacher asked questions that could be answered by holding up a specific card. This taught initial and final consonant sounds as well as alphabet knowledge.

10. Using Basal Series

   a. Pre-primers - words presented on word cards for daily drill. Oral reading took place everyday, if possible. As pre-primer words were mastered, they were put in short sentences on cards for drill using them in context. This proved to be a good review technique at all levels.

b. Grade Level textbooks - These books were used at the independent reading level of individual students in order to assure success. Students moved through these books with the aid of word cards and phonetic instruction.

CONCLUSION

The cooperative planning by administrators, reading teacher, and the classroom teachers, as well as the follow-up services provided by the reading teacher, school nurse, and the part-time psychologist will be a strong foundation on which to build an even more effective program. In addition to a general improvement in reading skills (test results enclosed) the following areas were found to be strengthened:

A. Self-concept was improved and confidence was gained by youngsters involved in the reading program.

B. The addition of an aide freed the regular classroom teacher for more personal attention to her students. She was also given the opportunity to innovate and supplement her instructional techniques.

C. The addition of the reading teacher and aide provided varied personalities with whom the students could communicate. This facet was extremely helpful in reaching and motivating youngsters with learning disabilities and/or emotional disturbances.

D. It was felt that the frequent, short periods of direct instruction in reading were more beneficial than removing students from their regular classrooms for weeks at a time. The students in the current program still feel the security of belonging to a normal classroom.

One specific objective of the Gilbert Title I program has been to take immediate steps to prevent reading difficulties in the first grade.

First grade pupils experiencing difficulty with grade level material were referred to a special reading teacher. No formal pretesting was done. These pupils were for the most part immature and not school-oriented. It was felt that a testing situation might prove a threat to them. Twenty-five percent of the youngsters referred were bi-lingual. Each student received 20 minutes per day of direct instruction in the reading center. The children were presented materials on a level which would assure their immediate success. The reading teacher also placed a great emphasis on each child developing a good feeling about his own capabilities.

Informal reading tests were used by the special reading teacher. In every student, a gain in reading level was noted. Another informal measure was a recall test of sight words. Concept development and coordination and maturity was checked by the use of the Draw-A-Man and Draw-A-House idea. Teacher evaluation was felt to be a prime factor in evaluation. Enclosed are the results of the Gates-Mc Ginitie (Primary A-Form one) administered by the reading teacher, and reading scores from California Achievement Tests administered by the classroom teacher.

On the basis of observation and informal tests, we conclude that every first grade child referred to the special reading class made progress of some degree. Individual differences among these students were wide spread. The four first grade teachers and the reading teacher have expressed the belief that, "without extra help in reading skills development, several of these students would be retained in the first grade." At this reporting only one girl and one boy will be retained. All the youngsters, and especially the bi-lingual pupils, have improved their oral language skills. We feel that a program such as this is an absolute necessity in order that we may retrieve these students. If reading problems are not given immediate, direct attention, we risk greater discipline problems in our upper grades and potential dropouts in high school.

FINAL REPORT

Primary Classroom Teachers Cooperating in the Title I Program

From the outset of the program, the classroom teachers have been involved from the standpoint of using a variety of ways for presenting material to the students in the classroom. We planned from the beginning for a teacher to spend some extra time with the students in her class who are identified in the Title I program. Without exception, all of the teachers were enthusiastic about the results in the reading program in Title I for the year. Comments were made relative to change in student behavior from participating in this special program. The students' attitudes were reported very much improved. Students had more confidence in their ability and met new tasks willingly. Academically, the indications are that higher achievement has been attained. Students who are in the reading program state that they now enjoy reading.

The additional books and materials that are made available to the students and teachers, have provided the stimuli needed to enrich the experiences available. One area in the program that was appreciated most by the teachers was the fact that the students are getting the special help needed, but they still felt that they belonged to their regular classrooms. Except for a brief twenty minute period with the special reading teacher, the students were in the classroom. The teacher would make many of the visual materials available to the individual student and also for the group. This activity was a source of pleasure to the students from the standpoint of operating the equipment and much practice in reading was achieved as captions from the various pictures were either read to themselves or to the group.

The greatest weakness we experienced in the program was the lack of parental participation as we had planned it. We worked with the Chairman of the Parent Advisory Committee, and she expended much effort in trying to get mothers to come into the school and spend some time working with the teacher. A stumbling block to the program was that many of our mothers work and those who did not work had a problem of baby-sitting for the younger children at home. We believe that in the coming year, we may strengthen this part of the program by having the teachers contact the mothers from their room, and make a personal invitation to the parents.

First Grade - Test Scores

Students	Gates-Mc Ginitie Reading Tests, Primary A May 1970 Vocabulary	May 1970 Comprehension	California's Achievement Tests Lower Primary-X, May, 1970 Vocab.	Comp.	Total Reading
(1)	1.4	1.5	1.3	1.6	1.4
(2)	--	1.3	1.1	1.4	1.2
(3)	--	--	--	--	--
(4)	1.7	1.4	1.5	1.8	1.6
(5)	1.6	1.4	1.5	1.6	1.6
(6)	--	--	--	--	--
(7)	1.3	--	1.3	1.5	1.3
(8)	--	--	--	--	--
(9)	--	--	--	--	--
(10)	1.5	1.2	1.4	1.4	1.4
(11)	2.2	1.7	2.2	1.8	2.1
(12)	1.9	2.0	2.3	2.3	2.3
(13)	2.2	1.7	2.5	2.1	2.4
(14)	2.2	1.9	1.5	1.5	1.5
(15)	--	1.5	1.1	1.4	1.2
(16)	1.6	1.6	2.0	.9	1.8
(17)	--	1.3	1.1	.0	1.1

First Grade - Test Scores

Students	Gates-Mc Ginitie Reading Tests, Primary A		California's Achievement Tests Lower Primary-X, May, 1970		
	May 1970 Vocabulary	May 1970 Comprehension	Vocab.	Comp.	Total Reading
(18)	1.6	1.5	1.7	1.8	1.7
(19)	--	--	--	--	--
(20)	1.6	1.6	2.1	2.1	2.2
(21)	2.2	2.2	2.0	1.9	2.0
(22)	--	1.5	1.2	.9	1.2
(23)	1.5	1.5	1.5	1.6	1.5
(24)	1.7	1.5	1.8	1.5	1.7
(25)	--	1.3	1.2	1.2	1.2
(26)	1.7	1.5	1.8	1.4	1.7
(27)	1.4	1.5	1.1	1.5	1.2
(28)	--	--	--	--	--
(29)	1.6	1.5	1.7	1.6	1.7
(30)	1.4	1.4	--	--	--
(31)	1.3	1.3	1.3	1.6	1.3
(32)	--	1.3	1.2	1.4	1.2
(33)	1.6	1.5	1.5	1.5	1.5
(34)	1.3	1.4	1.3	1.5	1.4
(35)	1.6	1.5	1.3	1.2	1.3
(36)	1.5	1.4	2.0	1.2	1.8
(37)	--	--	--	--	--
(38)	1.8	1.5	--	--	--

Second Grade - Test Scores

Student	California Achievement Tests Upper Primary-W, May 1969			California Achievement Tests Upper Primary-X, May 1970		
	Vocab.	Comp.	Total Read.	Vocab.	Comp.	Total Read.
(1)	1.3	.9	1.3	2.0	3.3	2.2
(2)	1.3	1.5	1.4	2.2	2.3	2.3
(3)	--	--	--	2.3	1.9	2.2
(4)	--	--	--	3.3	2.5	3.2
(5)	1.2	1.5	1.2	1.5	1.9	1.6
(6)	1.3	1.9	1.4	3.0	1.9	2.6
(7)	1.5	1.6	1.5	2.8	1.9	2.5
(8)	1.5	1.2	1.4	2.2	3.3	2.4
(9)	1.6	1.4	1.6	2.5	1.6	2.2
(10)	1.1	.0	1.1	1.3	1.9	1.4
(11)	2.0	1.2	1.8	1.9	1.8	1.9
(12)	--	--	--	1.4	1.7	1.5
(13)	--	--	--	2.4	1.6	2.1
(14)	1.4	1.4	1.4	2.6	2.1	2.5
(15)	1.5	1.6	1.6	2.0	2.0	2.0
(16)	--	--	--	--	--	--
(17)	--	--	--	--	--	--
(18)	1.5	1.2	1.5	2.6	1.7	2.3
(19)	1.2	1.9	1.3	2.1	1.7	2.0
(20)	1.1	.0	1.1	1.3	1.2	1.3

Second Grade - Test Scores

Student	California Achievement Tests Upper Primary-W May 1969			California Achievement Tests Upper Primary-X, May 1970		
	Vocab.	Comp.	Total Read.	Vocab.	Comp.	Total Read.
(21)	1.4	.0	1.4	2.1	1.6	1.9
(22)	1.0	1.2	1.0	2.3	2.1	2.3
(23)	--	--	--	1.5	1.2	1.5
(24)	1.2	1.5	1.3	1.6	1.8	1.6
(25)	--	--	--	2.3	1.7	2.1
(26)	1.4	1.5	1.4	2.4	2.0	2.3
(27)	1.5	1.9	1.6	2.8	2.4	2.7
(28)	1.6	1.6	1.6	2.8	2.6	2.8
(29)	1.2	1.6	1.2	1.9	2.1	2.0
(30)	1.0	.0	1.0	1.0	1.2	1.0
(31)	--	--	--	2.4	1.5	2.0

Third Grade - Test Scores

Student	California Achievement Tests Upper Primary-W, May 1969			California Achievement Tests Upper Primary-X, May 1970		
	Vocab.	Comp.	Total Read.	Vocab.	Comp.	Total Read.
(1)	2.8	2.1	2.6	3.8	3.7	3.8
(2)	1.9	1.6	1.8	3.1	3.4	3.2
(3)	1.8	1.6	1.3	3.3	2.7	2.9
(4)	1.6	2.1	1.7	1.7	2.4	2.1
(5)	2.5	1.4	2.1	4.0	3.7	3.8
(6)	2.0	1.6	1.9	2.4	2.7	2.6
(7)	2.7	2.0	2.5	3.8	3.4	3.6
(8)	2.7	1.7	2.3	3.7	3.2	3.4
(9)	2.2	2.0	2.2	3.3	3.1	3.2
(10)	--	--	--	3.2	3.2	3.2
(11)	1.8	1.6	1.8	1.7	3.5	2.8
(12)	1.8	1.7	1.8	2.5	3.3	2.9
(13)	2.5	2.3	2.5	3.0	3.5	3.3
(14)	2.1	1.7	2.0	2.0	2.6	2.3
(15)	2.1	.9	1.8	3.0	3.7	3.4
(16)	2.6	2.0	2.4	3.7	4.1	4.0
(17)	2.2	2.1	2.2	3.7	3.8	3.8
(18)	2.6	1.6	2.2	4.2	4.0	4.1
(19)	2.4	1.8	2.2	3.6	3.8	3.7

Third Grade - Test Scores

Student	California Achievement Tests Upper Primary-W, May 1969			California Achievement Tests Upper Primary-X, May 1970		
	Vocat.	Comp.	Total Read.	Vocab.	Comp.	Total Read.
(20)	2.2	1.9	2.1	3.6	3.8	3.7
(21)	--	--	--	2.3	2.4	2.3
(22)	1.9	1.6	1.8	3.7	3.1	3.3
(23)	1.7	.9	1.6	3.2	2.4	2.7
(24)	2.1	1.4	1.9	2.7	3.2	3.0
(25)	3.0	1.7	2.5	4.2	3.6	3.8
(26)	--	--	--	3.6	2.9	3.2
(27)	--	--	--	2.6	3.0	2.8
(28)	--	--	--	--	--	--
(29)	2.5	1.5	2.1	3.7	3.5	3.6
(30)	2.3	1.6	2.1	2.5	2.3	2.4
(31)	2.1	2.1	2.2	3.8	3.7	3.8
(32)	--	--	--	3.3	3.5	3.4
(33)	2.0	1.7	1.9	3.4	3.4	3.4

INTRODUCTION

Snowflake Elementary School District #5 consists of three schools: Snowflake Elementary with 408 enrolled; Snowflake Junior High with 300 enrolled; and Taylor Elementary with 192 enrolled. The towns of Snowflake and Taylor are 3 miles apart, with the Snowflake Junior High located midway between. Until about 8 years ago, these two towns were sleepy little hamlets serving large ranching and farming interests; however, the Southwest Forest Industries built a huge wood pulp plant producing news print, and this resulted in a sharp increase of property evaluation, tax rate, and, of course, many new families. As a result, Snowflake is now an incorporated town which is booming. In addition to the natural increase caused by the pulp mill, the Federal Government built dormitories for about 300 Navajo Indian students for Snowflake Union High School. This, in turn, brought more families into the area, including some Navajo families.

This district was chosen as a respresentative for the report mainly because of their Special Education program. While it is by no means a perfect program (the staff of Snowflake Elementary #5 would be the first to admit this), it is still a good program. The philosophy of the school seems to be . . . "let's take one step at a time . . . let's not rush into this program . . . rather, let's go slow and prove upon each point, and progress each year until we know we have a good program."

This is one reason why their entire program is not wholly centered around the Special Education program. Along with Special Education, the school promotes a reading program and a summer program for other educationally deprived students of the three schools. Their Special Education program is somewhat of a pilot program for smaller schools in their area.

PROJECT

Designing a Curriculum for the Disadvantaged

COORDINATOR

Mr. Larry B. Brewer, Superintendent, Snowflake Elementary District #5

OBJECTIVES

a. The improvement of one's self image
b. Provide special services for Special Education students
c. Provide a summer program for remedial students in the areas of Reading and Mathematics
d. Provide special services for Remedial Reading students
e. Provide psychiatric and counseling services to those in need

PROCEDURES

Special Education

This was a new program in the district, and although the instructor was employed by district funds, it was determined that a great deal of assistance would be needed for this group.

The parents of all potential Special Education students were contacted for their approval to test their children. The potential students were then tested by a qualified teacher in the district.

A full time teacher aide was then employed with Title I funds.

A tape recorder, an overhead projector, and an electric pottery kiln, a record player and filmstrip projector were purchased for the Special Education group.

Since the needs of this group are special, it was determined that such equipment should be made a part of the classroom furniture. Special interest books were also purchased for the classroom, along with various games, puzzles, and other high interest teaching tools.

All students were again tested for correct placement during the year by the Winslow Guidance Clinic.

The Special Education class consisted of three girls and eight boys ranging in age from 7 to 15 years. The girls and three of the boys were all removed from the classroom at various stages throughout the year.

The instructor worked very closely with the parents of these students, which resulted in the formation of a Navajo County Special Education Group. Meetings were conducted monthly, and an outside speaker was generally invited, as the parents were making every effort to become more acquainted with various approaches they could use in dealing effectively with their children.

Remedial Reading

The Remedial Reading Program in the district was one of long standing. The main problems were the large number of students to be served, and motivation of these children.

It was determined that a full time teacher aide should be employed to assist the Remedial Reading instructor. This aide would be available only to the Remedial Reading Program.

In addition, certain high interest reading materials were purchased to assist in the motivating of these students. Hoffman readers and portions of the Hoffman Reading Program, Sullivan Readers, Readers Digest Skill Builders, and the Bell and Howell Language Master Program are examples of the materials purchased and used as high interest materials for the use of these students.

The aide was trained to work with single students, as well as with small groups, and blossomed into an excellent assistant for the program. There were eighty-three students who participated in the program. The median reading level was tested at 1-2 on a pre-test administered before the child was admitted to the Remedial Program. A post-test revealed a median level of 3-1. Following in chart forms, are the eighty-three students showing their improvement and average gain.

SNOWFLAKE - TAYLOR SPECIAL READING PROGRAM (1969-70)

Reading Levels - September, 1969

Grade	PP	P	1-2	2-1	2-2	3-1	3-2	4-1	4-2	5-1	5-2	Total
2	15	12	8									35
3		1	7	8	2							18
4		3	0	3	1	3	4					14
5						3	3	3	4	3		16
Total	15	16	15	11	3	6	7	3	4	3		83

Reading Levels - May, 1970

Grade	PP	P	1-2	2-1	2-2	3-1	3-2	4-1	4-2	5-1	5-2	Total	Average Gain
2	5	0	4	17	8	1						35	.6
3		1	0	1	4	6	5	1				18	1.1
4		1	0	2	1	2	1	3	3	1		14	1.6
5								3	1	8	4	16	.9
Total	5	2	4	20	13	9	6	7	4	9	4	83	.93

It should be pointed out that there were approximately fifteen students who progressed sufficiently to re-enter their regular class for reading instruction. These fifteen students are not included in the above sample.

Following is a description of the remedial or special reading program, as conducted in the district:

1. The class length was 40 minutes for each group, and the groups met each day. The average size of the reading groups was eight students.

2. A great variation of materials was used. These materials included:

   a. phonovisual charts with nonsense syllables
   b. teacher produced phonics materials
   c. Ginn, Scott-Forseman, and Houghton-Mifflin Basal Reading Texts
   d. SRA Listening Skill tapes and linguistic readers
   e. The Sullivan Programmed Readers
   f. Phonics filmstrips

g. A good supply of library books
h. Bell & Howell Language Masters
i. Dolch basic word cards
j. Teacher produced vocabulary cards taken from student mistakes

3. Word attack and phonics skills were stressed. There were small group activities, as well as individual reading experiences. Work at home was stressed with two parent-teacher conferences being conducted during the year.

4. The testing was conducted through a teacher-made oral reading inventory, plus word lists taken from the Ginn Reading Series.

5. It was concluded that the Special Reading Program was a valuable asset to the overall program of the district. There appeared to be a greater need for slower developing materials which would allow for more repetition of basic reading skills.

Summer Program

A summer program for remedial students in Arithmetic and Reading was conducted throughout the district's three school involving eight teachers, one librarian, two aides, and eighty-five students.

As indicated, the class loads were small in order to give each student as much personal assistance as possible. Each student was able to begin at his/her own level and progress from there.

The Library was open one-half day throughout the program to help motivate and encourage the children in the area of reading. This proved to be a very popular part of the program.

INTRODUCTION

In February, 1966, Flagstaff Public Schools, both High School District #1 and Elementary District #1, were approved for funding under ESEA, P.L. 89-10, Title I. In succeeding years, the four phases of the project have continued to operate under the direction of district supervisors of remedial reading, libraries, guidance and counseling, and audio visual services. As the programs of these related departments have been developed to focus upon the objectives of the project, related benefits have accrued to the school district. In-service training has been extended to all members of the school district through the efforts of Title I personnel. Services and cooperation of numerous agencies in the city, the university, and the State have been pulled together to benefit students of the school district. These agencies include Federal programs other than Title I. Description of these activities as well as the organization of the various programs will appear in the succeeding pages.

PROJECT

Reading, Guidance, Counseling, Audio-Visual and Library Services

COORDINATOR

Mr. Don C. Clark, Assistant Superintendent, Flagstaff Public Schools

OBJECTIVES

1. Concentrating upon raising the achievement of educationally disadvantaged students through an emphasis on:

   a. reading
   b. library services
   c. guidance and counseling
   d. audio-visual approaches to learning

PROCEDURES

The initial funding of the Federal project was large enough to add specialized personnel to the school staff, purchase supplies and equipment that would augment existing programs, and develop creative approaches to the problems of educationally disadvantaged students.

As the funding was decreased, the school district has absorbed the personnel into its budgets to continue a program that has materially improved the educational offerings to students. Services and programs initiated by the Title I project have gradually become an integral part of the total school program. Each year the school district assumes the salaries of additional personnel from the Title I program, though the librarians, remedial reading teachers and counselors remain under project coordination regardless of the source of salary. The salaries of three of the four project supervisors . . . library, remedial reading, and audio-visual . . . are now paid by the district.

The philosophy and objectives implemented under the original grant are considered vital to the students' welfare and have been adopted by regular school personnel.

As a result, the main thrust in all schools is to concentrate efforts upon the educationally disadvantaged student. Though all students will benefit from library, audio-visual and counseling services, the materials and techniques in these areas and in remedial reading are selected for and focused on students who are thnically different, educationally handicapped or from low socio-economic background.

SERVICES PROVIDED

The continuing and foremost objective of the audio-visual department is to provide information, equipment, and materials to the teachers of the district so that they may more effectively communicate with students involved in the project. Most teachers request information from their schools' media personnel, and then the media personnel in turn consult the available resources of this department. Such correlation and cooperation has allowed the district audio-visual center to supplement rapidly growing collections of instructional materials in each of the schools. These materials are delivered to the instructional materials center of each school and are dispersed from there. As teachers have time, some of them come to the central audio-visual department to select their own materials for classroom use.

Another goal for this department has been to have all the materials housed in the district audio-visual center cataloged. At the present time, all of the tape recordings, 8mm film loops, and sound filmstrips have been processed. Still to be cataloged, are the remaining filmstrips and phonograph records. As groups of materials have been cataloged, a bibliography has been prepared and sent out to the individual schools so that they can more easily know what is available from this center. Because the materials did not all get cataloged, this listing is presently incomplete.

More and more machines which will allow the child who is inadequately developed in language skills to experience the spoken and written words through pictures and sounds have been purchased by schools where the needs of such children are the greatest. Among these machines are the cassette tape recorders and various types of language masters. These machines fulfill the basic requirement of being easy to operate by the child so that he can progress on an individual basis. Many more sets of earphones have been purchased, and these enable students to work alone or to work in small groups.

Besides attempting to set up small audio-visual production centers in each of the schools, the central audio-visual department's production center is growing. This equipment permits anyone to create and to produce media that applies to local circumstances and to individual situations. As the center expands, it can increasingly become a producing center that will augment, supplement, and personalize that which can be purchased from commercial firms. Most machines for duplication of visual and sound materials have been incorporated into the center. A portable cassette duplicator will be available next fall for any teacher or group of teachers to borrow. A portable video tape set-up will enable elementary teachers to more easily have this type of equipment available for educational use.

Workshop training for school personnel and other interested people has been provided by this department and is reported under the pages titled "Library and Audio-Visual Departments In-Service Training.

Much of the audio visual instruction this year has been done on an individual basis; as teachers or groups of teachers requested assistance, individual demonstrations were given. Several equipment demonstrations were given to student teachers at various elementary schools. The audio-visual supervisor presented audio-visual presentations at schools during the fall parent open houses. Various sales representatives from commercial firms have also presented workshops and in-service training in varied locations in the school system. These exhibits of new and innovative materials have been arranged through the audio-visual department.

The audio-visual supervisor, in cooperation with the State Audio-Visual Director, did an Educational Communications Survey for the Flagstaff Public Schools. The basic survey instrument was completed by the individual school principals and media personnel. This seventy page survey covered such areas as the Flagstaff philosophy of education; the survey itself covered administrative procedures, quality and growth of staff, materials, equipment and facilities, selection, classifying and cataloging, care and maintenance, classroom physical facilities, cafetorium physical facilities, and summary. A comparison of the Flagstaff materials centers with the DAVI/AASL standards was included, as was an evaluative checklist known as the Fulton Instrument. The final item of the survey was the Quantitative Standards for School Media Programs, Personnel, Equipment and Materials for Elementary and Secondary Schools which was prepared by a joint committee of the American Association of School Librarians and the Department of Audio-Visual Instruction (DAVI/AASL).

Many materials are consistently being checked out of the central audio-visual office to supplement the collections already in each of the schools. As the materials centers in each school grow, less demand is placed on the central office, as illustrated in the graph. Availability of materials and machines is of utmost importance as illustrated by the South Beaver Elementary School usage. Approximately three-fourths of all borrowed machines were lent to this one school. The graph is not completely accurate because once materials and machines were in a school, more than one person often used them. Out of this change in needs and demands has emerged a concept of a district production center rather than one of a storehouse of materials and equipment. More expensive and seldom used items could easily be purchased by the central office and be made available to all district teachers. Communication between teachers, curriculum coordinators, and the audio-visual department must necessarily accompany production of meaningful media and the deployment of significant services. The audio visual department should definitely strive to remain informed and alert to the needs of all individuals it serves. It must remain closely allied with those who regulate the curricula and must work intensively with those who are nearest to the demands and requirements of the students.

CIRCULATION OF AUDIO-VISUAL MATERIALS FROM THE DISTRICT MATERIALS CENTER (1969-1970)

SCHOOL	Filmstrips	Records	Filmloops	Trans-parencies	Printed Originals	Tapes	Study Prints/ pictures	TOTAL	1968-1969 Totals	Machines 1969-1970
Christensen	14	8	0	24	0	0	20	66		3
Emerson	13	0	22	0	412	0	0	447	201	2
+Guadalupe	191	14	12	14	1	2	3	237	1383	0
Kinsey	15	9	6	22	23	0	14	89	576	1
Leupp	0	0	0	0	0	0	1	1	16	0
Marshall	117	21	7	34	23	2	32	236	305	3
Mt. Elden	36	1	49	12	0	0	31	129	533	9
+Nativity	54	0	0	80	144	21	24	323	145	0
South Beaver	221	30	23	94	26	8	52	454	168	72
Thomas	55	0	25	125	163	2	15	385	835	7
East Flagstaff Junior High	3	0	18	0	2	1	10	34	932	3
Flagstaff Junior High	59	3	24	37	165	0	13	301	185	1
Coconino High	27	12	2	21	0	3	1	66	227	0
Flagstaff High	14	10	0	1	0	0	0	25	605	0
*NAU Elementary	2	2	0	54	0	0	2	60	3	0
*Sechrist	17	7	20	0	0	0	19	63	212	5
*Sedona	0	0	0	0	0	0	0	0	213	0
*Weitzel	31	11	1	10	129	0	6	188	834	0
TOTALS	869	128	209	528	1088	39	243	3104	7373	106

+ Parochial Schools
* Schools not eligible for participation under 89-10, Title I funding.

Library Program

This year, FY 70, the library program has been tuned primarily for the disadvantaged students in the target schools. In trying to answer the question of what constitutes good education for these children, a wide range of needs were identified. Instruction for bi-lingual and culturally different children must stress vocabulary development for understanding, improvement of listening abilities, ease and facility in language skills and conversation, encouragement of the child's self image and pride in the culture of his heritage.

Most of the contact and instruction in the library program has concentrated on language and personal development, and has been on an individualized or small group basis. Various activities and devices toward these goals have been employed in the separate libraries. In one school, students from the educational psychology classes at NAU worked in the library with problem students. The librarian cooperated by furnishing bibliotherapy materials and directing activities for the development of listening skills.

Indian children in one school were involved in a project in which tapes were made of first grade children reading to other children in the library. The tapes were then used in the classrooms for all the children.

One large bulletin - board in a hallway was devoted to newspaper articles of special interest, many about people the students knew. The librarian and reading teacher changed the bulletin - board every day, and students checked and read the display daily.

Paperback books with high interest and low reading levels were added to library collections; this seemed to encourage many reluctant readers.

Students were encouraged to enter the State Reading Programs, poetry contest and art contest. Many children received State Reading Certificates. Two students, both third graders, won honorable mention in the National Wilson Library Bulletin Contest. This was a cooperative effort between the librarian and the art teacher. The children's pictures were published in the local newspaper and they were honored by presentation of their awards at a school assembly. This created much interest in the library program and did great things for the children's self image.

All of the reading teachers and librarians worked hand in hand throughout the year. In one school, a sound-slide production was done on the use of the card catalog. This was totally photographed, scripted, taped, and presented by 6 fifth grade remedial reading students.

One school had a Hans Christian Andersen Day. An outside speaker showed slides of Denmark and told about her visit to Andersen's home. This created much interest in books on travel and Andersen's works.

The philosophy of the library program is to help a child help himself. With the great explosion of knowledge, we worked on the premise that the process of seeking knowledge is the only thing that will survive. Circulation figures as compiled on the following graph show a continual growth in library use, especially in schools whose library space was expanded to provide more room for student activities (Thomas, Mt. Elden and Marshall). Much creative growth and intellectual inquisitiveness have been in evidence, indicating that the library programs are success-

ful and objectives are being met.

Cooperation with Other Schools and Agencies

Northern Arizona University Elementary Library receives Title II monies for books and A-V materials which are ordered through the central purchasing and processing center. Elementary and secondary school librarians each had one monthly meeting to see books on exhibit at the NAU Elementary School.

The Neighborhood Youth Corps and Work-Study Program places students at the processing center for training. One Indian girl showed such promise that she was employed in the University library to help pay her expenses.

Again this year, a certified librarian was scheduled at Our Lady of Guadalupe School one day each week to assist the faculty in teaching the use of the library and reference materials and to stimulate reading and interest in books. Great strides in reading have been made in this school. The teachers make assignments that require research.

The summer programs are open to the students of both parochial schools, and many children take advantage of the public school libraries.

Excellent cooperation between the various libraries within the community was shown during National Library Week. The Director of the Public Library spoke to the students in the schools.

SUMMARY OF LIBRARY CIRCULATION FIGURES IN FLAGSTAFF SCHOOLS

SCHOOL	Cumulative Enrollment	Total Circulation 1970	Average Monthly Circulation		Annual Average Per Child
			Print	Non-Print	
Christensen (new school, open 6 months)	315	12,683	1,714	98	40.5
Emerson	337	15,604	1,346	215	46.3
Kinsey	522	20,017	1,899	104	38.3
Leupp	152	5,292	No Record		34.8
Marshall	518	25,875	2,357	221	49.8
Mt. Elden	1,023	49,601	5,040	472	48.5
South Beaver	249	16,176	1,703	27	65.0
Thomas	769	41,594	3,039	743	75.0
TOTALS	3,685	186,842	17,098	1,878	
East Flagstaff Junior High	714	16,362	1,570	2,475	22.9
Flagstaff Junior High	701	18,843	2,093	No Report	26.7
Coconino High School	854	9,082	1,009	No Report	10.6
Flagstaff High School	972	24,339	2,439	No Report	25.0
TOTALS	3,241	68,626	7,111	2,475	
*Sechrist	509	23,851	2,559	91	46.8
*Sedona	161	N O R E P O R T M A D E I N 1 9 7 0			
*Weitzel	618	30,081	3,107	235	48.8
TOTALS	1,288	53,932	5,666	326	

* Schools not eligible for participation under 89-10, Title I funding.

In February 1966, prior to the inception of ESEA, Title I, there were three counselors at the high school and four at two junior high schools. The department at the end of the school year 1969-70 included five counselors at two high schools, four at two junior highs, five in the elementary schools, a supervisor and two counselor aides working with elementary students.

The schools offer areas for referral when diagnositc procedures recommend specialized placement. The special education classes, subject area courses, and health services were available before and are now. Added to these, and vital to the educational growth of educationally disadvantaged students, are the remedial reading classes.

The counselors screen potential candidates for these classes, administer diagnostic tests in special areas including individual mental testing, visual and auditory perception. When more definitive evaluation is necessary, the counselors, with parental permission refer students to the Coconino Community Guidance Clinic. The recommendations of the counselors and the guidance clinic are available to teachers, parents and special teachers working with the child.

The counselors at each school are responsible for the pre and post-testing of students admitted to the remedial reading classes for the purpose of evaluation. A control group of comparable students is also selected and pre and post-tested for evaluation purposes.

PARTICIPANTS

The district's problems seem unique. Flagstaff is located at the south edge of the Navajo Indian Reservation which sprawls across three northern counties. Within the boundaries of the Navajo Reservation, and completely surrounded by it, is the Hopi Indian Reservation. Many members of the Navajo, Hopi, Hualapai, Havasupai, and Apache Indian tribes live off reservation, caught between customs, language, and traditions of their tribes and those of the white world into which they have been thrust. Cultural differences between tribes are in many ways as great as those between Indian and non-Indian.

The Flagstaff Indian Dormitory, administered by the Bureau of Indian Affairs, houses about 300 Indian students, mostly Navajos, ranging in age from 8 to 18, who are enrolled in the public schools in Flagstaff.

The southern border of Arizona separates the United States from Mexico. Many of Flagstaff's residents are of Mexican descent, either one or two generations removed from their homeland. Children from these families enter the public schools with all degrees of difficulties peculiar to the culturally and linguistically different individual.

Flagstaff lies in a vast ponderosa forest, and forestry is one of the predominant industries. Negro families have moved into the area from the South to work in the lumber mills and forests. Many Negro families are two or three generation westerners, while some have recently migrated from the South. Cross-cultural factors of the population compound the school problems of these children.

This diverse membership in the schools requires innovative teaching materials, equipment, and techniques to assist the culturally different students to adequately utilize the educational process. Materials and techniques appropriate for students from the average middle-class families are not appropriate for these students. It was to assist the district with this challenge that the Title I project was initiated and funded.

Flagstaff has two school districts, an elementary district covering kindergarten through eighth grade, and the high school district including grades nine through twelve. These two districts have coterminous boundaries. Within these boundaries is an area of seven thousand square miles, making the Flagstaff combined school district, the second largest in the nation. This high size creates transportation problems; 37 percent of the students live outside the city limits. These are either bussed to school or a subsidy is given to the parents to provide transportation.

The Flagstaff district includes eleven public elementary schools with students from kindergarten through sixth grade, two junior high schools with grades seven through nine, and two high schools, grades ten through twelve. The total enrollment is over seven thousand students. Two parochial schools serve an additional 450 elementary students. Two of the district's public elementary schools are located in outlying communities, an hour's drive from Flagstaff.

The Title I project has served approximately twelve hundred and twenty-eight (1228) students, 828 in elementary grades and 400 at the high school level.

During the school year 1966 staff members concentrated upon organization of the project, establishing reading centers, and setting up school libraries in the elementary schools as opposed to room collections. Students were tested and counseled to determine the types and degress of their educational handicaps. Appropriate materials were selected, curriculum was developed to attempt to meet the needs of school children from diverse ethnic backgrounds, with a multiplicity of school learning handicaps, and personnel were trained to most effectively relate to these students.

ESEA, P.L. 89-10, Title I has utilized the test information supplied through the district's testing program and added others that are used diagnostically by teachers and counselors to help improve the achievement of the students.

The original referral of a child to help a remedial reading class must have the information from:

1. Mental Ability Test

    a. Lorge-Thorndike Mental Ability Test for grades 2 through 7
    b. Otis-Lennon Mental Ability Test, grades 8 through 12

2. Achievement Test

    a. Stanford Achievement Test, grades 3 through 12

Students whose achievement is below their ability are eligible for enrollment in the remedial reading classes.

A diagnostic summary sheet is kept on each student by the reading teachers. The information delineates the various skills needed for reading competency.

3. Gilmore Oral Reading Test
4. Roswell-Chall (phonics)
5. Dolch Sight Word List
6. Ayres List (3rd grade level)

In order to detect and correct any primary reading problems, each child is screened visually and auditorily.

7. Keystone Telebinocular Visual Survey
8. Audiometer

When classes are stabilized (after the second week of school) one form of a test is administered to the remedial reading students (experimental group) and a comparable group (control group) for the purposes of evaluation. Another form is administered at the end of the semester or the year or when a student is returned to the regular classroom.

9. Gates Reading Test - Form 1 and 2

At times a more definitive evaluation of students is needed to determine whether the reading problem is the cause or the result. On an individual basis, when requested by parents, administrators, or teachers, elementary counselors administer the following tests and make recommendations for "prescriptive" teaching or referral to the appropriate agency.

10. Bender-Gestal Visual Motor Test
11. Marianne Frostig Test of Visual Perception
12. Wepman Test of Auditory Perception
13. Wechsler Intelligence Scale for Children (WISC)
14. Wechsler Adult Intelligence Scale (WAIS)
15. Columbia Mental Ability Test
16. Peabody Picture Vocabulary Test

The utilization of test results has been profitable for individual students in several ways. First and foremost, it helps assess the areas that need remediation and give the teachers information for remediation techniques. But, it has also pointed up the need for additional services and classes within the district, for sometimes, the reading problem is the result of emotional disturbance or mental retardation.

As a result of this information, the district has added two classes for the emotionally disturbed and increased the classes for the educable mentally handicapped.

STAFF

The staff utilized for the FY 70 project included 13 librarians, 14 counselors, 15 reading teachers and 4 teacher aides. Title I funds provided salaries for some of the personnel; 15 teachers, and 4 teacher aides.

All teachers are certified in Arizona and have teaching experience ranging from 2 to 17 years with the average experience running 7 years. All have degrees; most have an M.A. degree plus additional graduate hours and all counselors have M.A. degrees plus graduate work in their field.

RELATED COMPONENTS:

The audio visual supervisor conducted both group and individual seminars for teachers and for student teachers on the use of various audio visual machines in the local schools. A special demonstration was given to the reading teachers at one of their monthly meetings. Several educational demonstrations were arranged for commercial representatives to demonstrate products. A special in-service session on overhead projection and various ways of producing transparencies was presented by the State Audio-Visual Director.

The music, library, and audio-visual supervisors attended the music and media conference which was held in Tucson to illustrate how these three areas can work together to form a combined unit.

The library and audio-visual supervisors combined efforts to present the use of the materials centers to the district sponsored team teaching class this spring which was attended by some 125 local teachers.

The audio-visual supervisor was the regional representative of the Arizona Association for Audio-Visual Education, AAAVED. As a joint effort of the AAAVED and the Flagstaff Public Schools, one of the district librarians and the audio-visual supervisor co-hosted a regional conference on Communicating Through Media. Although it was presented on a Saturday, over 125 people from a three-county area were in attendance. The main area of interest was photography. Several Flagstaff teachers also gave special audio-visual demonstrations on classroom techniques. Thirteen commercial exhibitors gave interesting and educational demonstrations.

The librarian and audio-visual supervisor also attended the AAAVED Convention which was held in Phoenix. Both of these activities pointed up the continual changes and improvements in the media field and the necessity for keeping abreast of new ideas and concepts.

Twelve librarians, the library and audio-visual supervisors attended the INFO '70 Conference, The Dynamic Merge, which was held in Prescott.

Educational films, Project History and Let Them Learn, were made available to the librarians and teachers in each school by Encyclopedia Britannica for in-service training on imaginative use of the library.

Six librarians and the library supervisor attended the State Library Conference in Tucson. Eight librarians attended a workshop at the Phoenix Public Library on children's literature, use of puppets, story telling, library displays, and bulletin boards.

The elementary and secondary librarians met monthly in separate sessions with the supervisor for in-service training. The library science instructor at Northern Arizona University discussed handbooks and policy sheets in one session. Each

librarian wrote a policy sheet for her school and work was begun on a handbook for the district. An English professor at NAU discussed folklore, its uses in the curriculum, and how to introduce it to students.

Five librarians took the in-service training course in linguistics at NAU which was sponsored by the district.

The library supervisor and an elementary school principal attended the Western Inter-State Commission for Higher Education workshop in Santa Fe, New Mexico on Hispano Library Services for Arizona, New Mexico, and Colorado. A program is now being written to implement the new procedures and suggestions for realistic use of library materials by bi-lingual Mexican American Children.

Cooperating with other Agencies and In-Service Training

The effectiveness of the guidance and counseling department is expanded enormously by bringing together and coordinating the services of outside agencies for the benefit of school children and the training of staff members. The school district holds contracts with two such agencies, one at the elementary and one at the secondary level.

The State Division of Vocational Rehabilitation is a contractual agency serving the Flagstaff High School District. Potential dropouts are referred to DVR, and if they meet the criteria of eligibility (social, emotionally maladjusted, ethnically different, economically disadvantaged, or unable to succeed in regular school), these students are enrolled at the Institute for Human Development for remedial teaching, counseling, diagnostic services, and vocational training. Fifty-two junior and senior high school students were referred this year to the Institute for Human Development under this contract with DVR.

Enrollees at the Institute, staff members, and public school counselors, school board members and administrators met for a workshop session and a luncheon prepared by the students themselves. Causative factors that may have led to school failure, intervention techniques that could have been employed, and the future of the enrollees were discussed. All enrollees had a history of problems in school learning at the elementary level and believed that intervention with specialized services at that time could have prevented or allayed later difficulty.

The Coconino Community Guidance Clinic is a contractual agency with the Flagstaff Elementary School District. It offers diagnostic services for students whose problems are beyond the scope of the elementary counselors. Fifty-seven students representing every ethnic background and socio-economic status have received services from the psychiatric social worker and psychologists on the staff. Consultative services and staffings on these students are accomplished at the school site, involving classroom teachers, special teachers, principals and counselors. Parent consultations are also a part of the contractual agreement. Though treatment is not covered under the contract, the clinic has been closely allied with counseling personnel, taking referrals at clinic rates for students and parents who are in need of psychiatric or psychological services.

Through government grants administered by the State Department of Public Instruction, funds were made available to the school system for development of special services in the area of guidance and counseling. The Education Professions Development

Act (EPDA), through the State plan, part B, subpart 2, offers training and placement of aides in public schools. A proposal was submitted by the Flagstaff Elementary District requesting two para-professional counselors for two schools with a high concentration of students from minority groups. This proposal was approved and funded, and two Negro women were placed--one at Kinsey Elementary School, one at Flagstaff Junior High School--to act as liaison between the schools and the parent communities. These aides received a semester's training within the counseling department at Northern Arizona University, and were members of the department, attending all workshops and departmental meetings. Their principal functions in the schools are making home visitations, helping teachers understand the community problems these children face, and helping the administration of the schools explain school policies and curriculum to parents.

In an effort to make information available to primary teachers on diagnoses and therapeutic techniques that can prevent or ameliorate school learning problems, department personnel submitted a proposal for in-service training which was funded through ESEA 89-10, Title V. A series of five, three hour workshops focusing on the child in the classroom who is different from the "average" was offered to primary teachers, counselors and administrators. The Mini-Workshops, entitled "The School and the Exceptional Child," were video taped for future in-service training. University consultants worked with elementary counselors to conduct the individual workshops, which dealt with:

1. Modifying Behavior to Motivate Achievement
2. Emotionally Disturbed Children
3. The Culturally Different Student
4. Learning Disabilities and Remedial Techniques
5. Test Interpretation

At the conclusion of the series, participants were asked to evaluate the workshops, and a complete evaluation was compiled. It indicates that the workshops were particularly useful and pertinent for the classroom teacher.

A proposal was submitted under NDEA Title V - a, for guidance and testing support. The approval and funding of this proposal added invaluable materials and equipment to elementary and secondary counseling programs.

The Northern Arizona Supplementary Education Center (NASEC) a Title III program, has offered consultative services, demonstrations of counseling techniques, and workshops in the counseling areas.

Liaison between school and community agencies has improved to their mutual advantage in the past four years.

The Community Action Agency has cooperated with the counseling department to effect changes in the approach to disadvantaged students including students in the Neighborhood Youth Corps. NYC students are tested and participate in vocational guidance sessions and group counseling with school counselors. Follow-up conferences and guidance activities are then programmed into the high school's yearly guidance activities.

Staff members of the Coconino County Welfare Department have attended workshops

ing were requested by teachers and parents to help adjust curriculum to the students' abilities. Our Lady of Guadalupe School utilized the services of the counselor to administer auditory and visual perception tests to make recommendations for grouping to remediate areas of deficiency. The counselor was of great service to the parochial school as it initiated a non-graded curriculum in the primary grades.

Extensive group counseling was tried in a high school where racial tensions were arising for the first time. Principals and counselors together selected forty-eight students who they felt were in need of guidance. Twenty of these had been seen several times for disciplinary reasons. The other twenty-eight appeared to be potential dropouts due to low achievement, poor attendance, classroom disruption, or had indicated feelings of prejudice or a general lack of social adjustment. These students, plus eighteen who were academically and socially successful, were divided into eight groups for group counseling. It was endeavored to make each group a realistic one: students were of different ethnic groups, different backgrounds, varying ability, and at different degrees of social adjustment.

The effectiveness of the group counseling was evaluated by the assistant principal in the following manner:

1. Additional students requested to be placed in groups.

2. During the remainder of the first semester only two of the original twenty students were referred to him for disciplinary action.

3. At the end of the first semester many students had removed themselves from the failing list. One student who was close to failing made the honor roll.

4. Faculty members and principals noted better attention in class, improved work and participation, better attendance, fewer racial overtones, greater communication between students of different ethnic backgrounds; girls appeared to take more pride in themselves, dress better, and display better manners; shy students appeared to make friends; students learned to exchange ideas and gained greater respect for one another. Three girls who had been hostile and negative received awards for "Most Improved Students" during the awards assembly.

SUMMARY

It is difficult to measure the effectiveness of a service activity. During the 1968-69 school year a quantitative measure of use of counselor time was kept, although such a report tells only how the counselors spent their time and not whether it was beneficial to students.

The usefulness of counseling services at the elementary level is evidenced by the increased number of students referred by parents and teachers.

An increased awareness of a classroom climate to prevent mental health and school learning problems was noticed among teachers who attended department sponsored workshops. Over eighty primary teachers attended three hour Mini-Workshops held after school for five successive weeks. Counsleors reported an increased call upon their services to implement programs of prevention in the classrooms.

with the counselors. They have participated in staffings concerning counselees who are on welfare rolls, and have helped interpret welfare policies so that eligible students and their families may benefit.

An Inter-Agency Council coordinates the services of member agencies. The counseling supervisor, as a member of the council, attends its monthly meetings. Counselors are present whenever staffings concern a student. Students may often profit from the services of the Community Action Agency, the Bureau of Indian Affairs, the Salvation Army, and the Department of Vocational Rehabilitation. but each agency must know the services offered by other agencies and the limitations imposed by law on all agencies.

Typical of the cases that need attention is the sixteen-year-old boy from a disadvantaged home, who was picked up by the juvenile officers. By attendance rules he would have been suspended from school for excessive absences. The juvenile authorities worked with other agencies and the public schools to have him placed on probation, the mother was placed on the welfare rolls, the Employment Office tested the boy and placed him on a part-time job. The Salvation Army clothed him for both school and job, and the Community Action Agency provided a haircut that he had not been able to afford. At the end of school, this young man had completed his junior year satisfactorily and will be ready to graduate in 1971. He also has summer employment through the Neighborhood Youth Corps.

The members of the counseling department met weekly during September with personnel from cooperating agencies; Division of Vocational Rehabilitation, Institute for Human Development, Coconino Community Guidance Clinic, State Welfare Department, along with public school nurses, and counselors from the Bureau of Indian Affairs Dormitory, in order that understanding of the services each had to offer could be shared.

The monthly meetings from October through May included in-service training on Dope Stop, Alateen, Crisis Intervention, reports from counselors on techniques that seemed advantageous, and normal departmental information.

EFFECTIVENESS: Special Service Activities

A goal of the counseling curriculum is to prevent school learning problems assessing causes of failure and using prevention techniques early in the school experience.

Using the Marianne Frostig Test of Visual Perception, the Purdue Perceptual-Motor Survey, and the Wepman Test of Auditory Perception, it was determined that there was a high incidence of perceptual and neurological dysfunction among children in three schools with a concentration of minority students. The counselors and teachers set up developmental classes during the second semester with the use of student aides from the educational psychology classes at the University. One class was organized at Emerson School; four groups totaling about 50 kindergarten children were conducted at South Beaver School; and with the assistance of the para-professional counselor at Kinsey School, four groups were organized there. Students will be tested in the coming year to determine if maturational development was significant.

Elementary counselors were assigned to the parochial schools within the district on a one-day-a-week basis. Individual counseling, mental testing and special test-

Elementary principals have requested more counseling time for their schools. Secondary principals have requested clerical aides for counselors to permit the certified personnel to spend more time with students.

A school psychologist, clerical aides, and two additional counselors will be added to the department in the 1970-71 school year.

Four para-professional counselors have been approved through EPDA, part B, subpart 2. Minority group representatives will be hired and placed in schools where their understanding and talents are most needed.

Through these additions to the staff of the guidance and counseling department, and through improvement and expansion of services, more students at all levels may seek out the counselors for assistance in school problems and peer relationships. Parent contacts with counselors have increased to the point that family counseling will be one of the areas explored in the future.

BUDGET:

The total budget for the Flagstaff FY 70 project was $239,102.59; the elementary allocation was $153,867.95, and the high school total was $85,234.64 for an investment per child of about $194.71.

REMEDIAL READING, NARRATIVE REPORT

The urgent necessity to help poorly performing children to realize their learning potential gave rise to the organization of the remedial reading program as part of Flagstaff's Title I project. The program is now four years old and has become an integral part of the total school curriculum. Though every school in the district has the services of remedial reading teachers, the focus of Title I is in those schools whose population includes a concentration of low socio-economic, ethnically different children.

Staff of the special reading program has grown to a total of fourteen full-time and one half-time teacher, nine and a half at the elementary level and five at the junior high and high school level. One new full-time teacher was added during the second semester in a junior high with a high percentage of Mexican-American students. At the same time four teacher aides -- three of whom are Negro and Indian women -- were hired to serve full-time in the remedial reading programs at each junior high and high school. Cumulative enrollment in remedial reading for the current year is over one thousand students. Daily classes range from one-half to one hour in duration with enrollments ranging from three to ten students, though at times teachers will schedule particular students on a one-to-one basis. (Leupp Elementary School, fifty miles from Flagstaff, is served on a weekly basis) Close cooperation between the classroom teacher who refers a child, the school administrators, and the remedial teacher is vital.

Particular emphasis has been placed on individualizing instruction and on curriculum improvements in the remedial reading classes this year. Toward this end, in-service training of reading teachers has been stressed, particularily in the areas of bi-lingual and bi-cultural problems, learning disabilities, and broadening teacher competency.

The Instructional Program

The continual goal of each remedial reading specialist is to pinpoint the deficiencies, discover the causes if possible, and to work out solutions for each child's reading difficulties.

The comprehensive testing program helps to identify and measure the extent of reading retardation. Diagnostic tests administered include; the Gilmore Oral Reading Test, Dolch 220 Sight Words, Roswell-Chall Diagnostic Test of Word Analysis Skills. Special diagnostic tests and individual intelligence tests are administered by counselors when indicated. Each class member is given a pre and post-test in reading achievement for purposes of program evaluation as well as a measure of individual progress. A form of the Gates-MacGinitie Reading Test is used, as is described in the next chapter.

Physical screening tests for each enrollee are accomplished by teams of lay volunteers trained and directed by the reading supervisor and the director of health services. Visual and hearing tests are included, using the audiometer and telebinocular instruments. These screenings were completed earlier and more efficiently this year, with the result that medical follow-ups benefited children with anomalies as early as possible in the school year.

Reasons for reading failure may often be quickly predicted by a look at the character of the district's population, cultural and language differences, poverty of experience, lack of motivation for many reasons. Physical or perceptual handicaps, mental retardation or educational deficiency may show up with further inquiry. The temptation is to look at the mobility of a large segment of Flagstaff's school population and assume that our problems are inherited, that interruption and lack of continuity in their education accounts for the reading incapacity of referred students. The data shows, however, that Flagstaff's remedial reading students are largely products of the community and schools, not predominantly transient students. Fifty-seven percent of the remedial reading students for whom evaluative data were complete have received all of their schooling in Flagstaff. Only eight percent are students new to the system. Therefore, our problems are homegrown and our own to solve. Further inquiry into the constituency of remedial reading classes shows a higher proportion of minority group members than in the district at large. The ethnic balances are as follows in the current year:

	Anglo Students	Indian Students	Negro Students	Spanish Surnamed American Students
Remedial Reading Membership	45%	19%	10%	26%
District Membership	65%	11%	5%	19%

The remedial teacher's job, then, is to take the child as he comes to her, remediate his difficulties as effectively as possible, and prepare him to work optimally in his regular classroom. She looks at the backgrounds, interests and abilities, and skill deficiencies of her students. She does this through personal knowledge of her students, through small group inter-action and through extensive testing. As each teacher attempts to individualize the class content for her students, many different methods, materials and techniques are employed. At her disposal are the resources of the Title I programs in library, counseling and audio-visual as well as motivational materials and skill building materials, good collection of high interest, low vocabulary books on a wide variety of appealing subjects, filmstrip and film loop projectors, record player, overhead projector, tape recorder, tachistoscope and controlled reader. Most improtant is her own ingenuity and competency.

One teacher with the cooperation of classroom teachers and principal was able to schedule a group of Indian stduents at a special time for more experiences in verbalization and vocabulary. She found filmstrip materials which captured their interest and led to discussion and reading projects. Attitudes toward reading were affected. In an informal evlluation, she noted that interest was high and that definite progress was made.

An experience approach was embarked upon in a small elementary school in which the student body is predominantly Negro, Mexican American and Indian. The special reading teacher worked with the principal, librarian, and classroom teachers to arrange a year-long program of curriculum enrichment for intermediate level students. Activities included attendance at an opera, a ballet, symphony and community concerts, and dramatic productions. Tickets were financed by local service clubs. Speakers brought to the school included an astrogeologist who showed unedited movies of an

Apollo moon mission, and the chairman of the State Pollution Control Commission. Field trips were conducted to Wupatki National Monument, Sunset Crater, the Museum of Northern Arizona, U.S. Naval Observatory, the city water filtration plant, and to the biology and geology laboratories at NAU. All these experiences were followed-up in remedial reading classes by discussion and the use of related materials.

Other teachers used a linguistic approach to reading, such as the Sullivan materials, discovering that some bi-lingual children do exceptionally well with this method.

Forty-one members of a university class in basic methods of teaching reading were scheduled as aides in the special reading classes. A directed program of observation and participation was planned by the supervisor of remedial reading. Many of these students were able to instruct children on a one-to-one basis under the direction of the special reading teacher. Response of the college students was enthusiastic to the extent that many voluntarily doubled the observation time required of them. The university professor and reading supervisor feel that the experiment was useful to the schools, invaluable to prospective teachers, and should be repeated.

Training and Professionalism

Staff competency has been augmented through a broad effort in in-service training and professional improvement during the current year. The in-service training agenda was based on the areas in which the teachers felt the greatest need. Meetings were held monthly for one and a half hours at lunch time, by arrangement with each teacher's principal. At one meeting, several reading teachers and the audio-visual director demonstrated the use of the machines and materials available such as the DuKane, Suzette, controlled reader, tape recorder, language master, and shadowscope. Ideas were shared at another meeting at which each reading teacher described and illustrated a technique or motivational aid which she had found effective. Skill development was discussed at a third session; elementary and secondary level teachers divided up to survey a wide range of commercial materials including phonics, programmed and basal materials, and special teaching approaches. A consultant on Indian education for the State Department of Public Instruction presented films, tape recordings, printed resource materials and a lecture on the problems confronting bi-lingual or non-English speaking children. This subject consumed two training sessions. Reading instruction for disadvantaged children, and departmental business regarding the spring reading conference were subjects of the final meeting.

Reading teachers have requested that next year's in-service training emphasize the area of learning disabilities, including testing and diagnosis, application of special teaching methods and materials for effective remediation or circumvention of disabilities.

The supervisor of remedial reading was released for three weeks to observe the McGlannon School, a private school in Miami, Florida which has done much research in the area of learning disabilities. Curriculum innovations for the purpose of giving more emphasis to learning disabilities were studied and observed in several public schools in Dade County, Florida at the same time. The results, in the form of films, materials, and observational notes of the visitation will be incorporated

into the in-service training for 1970-71.

Three specific bibliographies of books of special interest for Negro, Indian, and Mexican American students were compiled by the supervisor of reading and distributed to teachers. Sample books from these lists have been shelved in the reading center where teachers may peruse and evaluate them. This examination by the teachers can serve as a basis for their requisition of materials.

An in-service course on linguistics financed by the district and coordinated by the supervisor of language arts, was held at Northern Arizona University. Five university professors, experts in the field, conducted the course. The majority of special reading teachers enrolled in this course.

To help establish better coordination between classroom teachers and special reading teachers, the reading supervisor attended district grade level meetings for kindergarten through grade seven. The special reading program, study guide and materials were explained and discussed at each of these meetings.

The second Northern Arizona Reading Conference was held in Flagstaff in April under joint sponsorship of the Title I reading program, the NAU Education Department, and the Northern Arizona Supplementary Education Center, Title III. Theme of the two day conference was "Reading Instruction for the Disadvantaged". Fifteen section meetings focusing on teaching materials, methods, and approaches for disadvantaged Indian, Negro and Mexican American students were conducted by specialists from throughout Arizona. The supervisor of reading served as chairman of the section, "Materials for the Disadvantaged". The conference was enthusiastically received by over two hundred teachers from throughout the northern part of the State.

As an indication of increasing professionalism among members of the remedial reading staff, two additional teachers secured their reading specialist certificates this past year, making a total of five now holding the certificate. Two more teachers will finish requirements in 1970-71.

All special reading teachers are members of the Northern Arizona Council of the International Reading Association which was organized in the spring of 1969.

Study Guide

Many requests from within and outside of Arizona have been received for the Handbook of Corrective and Remedial Reading completed by this department in 1968. A supplement has been added listing high interest low vocabulary books and all new books purchased since the guide was published. The handbook continues to serve as a guide for the remedial reading program.

METHODS OF EVALUATION

The remedial reading classes, one phase of the four-pronged approach to improving the educational offering for disadvantaged students, were used as the basis for the statistical evaluation. These students comprise the experimental group.

Comparable students matched as nearly as possible by ability level, minority group, sex and grade in school, who are not enrolled in the special reading classes, make up the control group.

Appropriate levels of Gates-MacGinitie Reading Tests were administered to all members of the experimental group in September, 1969. Students who would be considered for membership in the control group were also tested with appropriate levels of the same test. Form 1 was administered as a pre-test.

Form II of the Gates-MacGinitie Reading Tests were administered as the post-test in May, 1970, upon completion of a year's remediation. Students who were returned to the classroom before the end of the year were given a post-test on termination of remedial work.

Students in the remedial reading classes were the focus of a concerted and concentrated effort involving the use of libraries, audio-visual materials, counseling services, and individualized reading instruction. The hypothesis was that growth in achievement, as measured by a standardized reading test administered to remedial reading students, would evaluate all four areas of the Title I project. All students, including members of the control group, have access to the library, audio-visual, and counseling services and materials, though perhaps not to the extent that these services were focused upon remedial reading class members and disadvantaged children.

The educational philosophy of the district does not permit depriving any students of these benefits just for evaluation purposes. Consequently, the only measurable difference in treatment between experiment and control group members is exposure to the remedial reading classes.

The information necessary for computer programing of the results of the remedial reading program was incomplete on 175 remedial reading students from grades 3 through 12. The reasons for eliminating these cards were:

Students transferred to another school	9
Withdrew and transferred to another community	55
Incomplete data	49
Returned to classroom for various reasons	62
TOTAL	175

Statistical Analysis

The data on the evaluation cards were used in the statistical design to measure the impact of the special areas of the 89-10, Title I program on disadvantaged students.

The "Analysis of Variance for a Treatment by Levels Design" from Design and Analysis of Experiments in Psychology and Education by E. F. Lindquist, was the statistical design employed. The specific computer program was written by Dr. Lawrence Castro, Director of Educational Research, Northern Arizona University.

Differences between pre and post-test scores, used as an indicator of achievement gain, were analyzed by grade level, by ethnic division, and by ethnic division within each grade level.

STATISTICAL EVALUATION

Complete data for 810 students enrolled in the remedial reading classes and for 804 students comprising the control groups were analyzed by computer. The statistical design used to evaluate the program was an analysis of covariance, specifically written for this program by Dr. Lawrence Casto, Director of Educational Research, Northern Arizona University.

The experimental and control groups were matched as closely as possible, but variance occurred, especially as to IQ scores. A covariance technique was used so that adjustments could be made in differences between the groups on a variable which would logically be expected to make a contribution. In the analysis of achievement gain between pre and post-tests for the two groups, adjustments of the results were computed for the variance in IQ scores. The need for controlling the IQ variable will be noted in the center column of the tables listing the mean IQ scores for each group. In every comparison on both tables, control group members show a higher mean IQ as measured by verbal tests. The differences average 4½ to 5 IQ points.

Comparisons for Total Group

The achievement gain is expressed in terms of the mean difference between the pre-test and the post-test grade placement scores, showing years and months of grade placement growth. Thus the figure 1.52 for Negro students represents over a year and a half grade placement growth (or achievement gain) during the period of remediation. The mean achievement gain is computed for the length of time a student spent in the remedial reading classes. For some students, placement in the class was for a year's duration; for other students, two or three months or a semester. The analysis considered all students as if they had been enrolled for a full year, so mean achievement gain in any group does not necessarily reflect a full school term of remediation. Some children achieved 1.00 (one year grade placement) or more growth in one semester and were returned to the classroom.

A statistically significant achievement gain is shown for members of the remedial reading classes in the vocabulary subtest when data for the total group is analyzed.

For this analysis, a random elimination of data cards was made until groups were equated by number.

Comparison by Ethnic Divisions

Since the Flagstaff Public Schools were eligible for assistance under Public Law 89-10, Title I partly because of the minority groups within the school population, it seemed appropriate to determine the effectiveness of the treatment upon members of ethnic divisions, Anglo, Indian, Negro and Spanish-Surnamed American (or Mexican American).

Table 1 shows the adjusted mean achievement gains with IQ held constant for control and experimental groups in the four ethnic divisions. In the vocabulary subtest, a significant advantage may be noted for all experimental groups. In the comprehension subtest, only the Spanish-Surnamed Americans show a statistically significant difference in favor of the experimental group, though Indian and Negro remedial reading students also gained more in comprehension than students in the control groups. Anglo students show significantly less gain in comprehension than do control group members.

Comparisons by Grade Level

The data cards were separated according to grade to investigate the possibility that the treatment is more effective at one level than another. Again, it will be noted that mean IQ scores for control group members are higher than for experimental group members; analysis again held the IQ constant for realistic comparison. Table 2 lists the achievement gains in terms of adjusted mean grade placement growth by grade levels.

For all grades the difference in mean achievement was in favor of the experimental group in vocabulary, though only in grades 5, 8 and 9 are the differences statistically significant. The difference in mean achievement gain in comprehension is significant at grades 6 and 9. Grades 10, 11 and 12 showed a regression in comprehension in both groups.

Comparisons by School

Examination of achievement gains within each school was made. Though all but two of the schools for which data were gathered are eligible for participation in the Title I program, seven schools are considered the focus of the efforts for educationally disadvantaged and ethnically different students. These are Emerson, South Beaver, Kinsey, Leupp, and Mt. Elden elementary schools, and Flagstaff Junior High and Flagstaff High School. In the public schools, all significant gains in achievement in favor of the experimental groups occurred in these target schools (see Table 3). In each subtest, nine of the fifteen schools show higher achievement growth in experimental groups over control groups.

Interpretation of Results

Data are more meaningful when reasons for collecting the information are understood and when limitations of collectors and computers are admitted.

SUMMARY AND RECOMMENDATIONS

Flagstaff was eligible for participation in the Title I project partly on the basis of census figures which enumerated the number of families within the poverty criteria and the percentage of ethnically different inhabitants. A perusal of the achievement test results for the school district revealed that a large percentage of the student membership was achieving below the national average and below the average ability level of the student body. The percentage of low achievers was in direct ratio to the percentage of economically disadvantaged and ethnically different students in the schools.

The multi-faceted effort of the district to raise the achievement level of these children has been covered in the preceeding pages. The results of these efforts have been measured statistically through one phase of the program alone--the achievement of remedial reading class members.

As has been described, a control group was selected to correspond to the experimental group by grade level, sex, ethnic division, and ability level insofar as membership within the individual schools permitted. Data were collected from pre and post-testing using a reading achievement test of multiple levels.

Though covariance analysis was used to allow for one considerable variable between remedial class members and control group members--differences in verbal IQ scores--other uncontrollable factors may affect the comparisons.

1. Duration of remediation: The data were analyzed as if every student were exposed to the remedial reading experience for the same length of time. Cards were eliminated if remediation was less than four months, but many individuals received a half year's remediation or less. Students were returned to the regular classroom as soon as achievement was commensurate with ability. Junior and senior high scheduling often allowed only a semester of remedial reading. Special reading programs for some classes were several months late in starting because of the disruptions of opening new schools and moving student bodies. Differences in remediation time were not considered in the statistical analysis. For the most part, control group records represent a year between pre and post-testing.

2. Improved classroom climate: The classroom situation for control group students can be expected to improve when remdial readers leave for the special classes, and with the addition of audio-visual, library, and counseling services.

3. Repeaters and slow learners: Ten percent of students in remedial classes have repeated a grade. The possibility that they are slow learners rather than retarded readers should be investigated through more objective testing--individual tests, as opposed to verbal tests. A culture fair test could be administered. The same research should be initiated for those students who have a verbal IQ score in the 80's to determine if they are slow learners who would be as well off in the regular classroom if they are learning at their potential, even though below grade level.

What has the program achieved? The data show that remedial reading classes are effective to the following extent: remedial reading students in total gained significantly more than control group students in vocabulary achievement scores. Neither remedial reading students nor similar control group members as a whole showed remarkable gains in comprehension. This seems paradoxical in a structured remedial reading course; since vocabulary is basic to comprehension, it was assumed that the achievement gain would be approximately the same in both areas. To further complicate the findings, it is noted that minority group students showed more gain in comprehension than did Anglo students.

As statistical results are interpreted, the directors of the program ask themselves: do differences between control and remedial groups indicate that the treatment is effective? Are actual, not comparative, achievement gains sufficient? Are the students catching up fast enough? Are their problems being remediated surely and quickly enough to satisfy goals and expectations of the program?

The answers to these questions are qualified by the subjective judgements and expectations of everyone involved--students themselves, teachers, and program administrators.

The supervisors feel, however, that the program is good. Teachers are highly competent. Excellent materials are available. The opportunity is at hand to make the program better for the students. To this end, the following recommendations are

made for the coming year.

1. Length of the daily instructional time should be studied to determine if one hour periods of remediation would bring a correspondingly greater benefit to students.

2. Since the formal structured remedial program has proven advantageous to most, but not all students, it seems appropriate to investigate other programs, materials, and techniques for improving their school achievement. For example, should language structure or linguistics receive more emphasis, especially in cases of bi-lingualism?

3. What part do perceptual handicaps play in the reading disability of some students? Pre-remedial techniques for the perceptually handicapped child should precede a formal stuctural remedial program. The opportunity to create a learning disability class for these children would give an opportunity to concentrate on the special problems of these children.

As a final recommendation, the directors feel that it is time to evaluate the evaluation. What changes other than achievement gain on a reading test are being sought? In what other ways is the school experience of students becoming more satisfying? Are any of these aspects of the program, or behavioral changes in the students, measurable? Such inquiry will entail a hard and searching consideration of the project, its goals, its accomplishments and its measurement, with all personnel brainstorming together.

TABLE #1

COMPARISON OF MEAN ACHIEVEMENT GAINS[1] FOR ALL STUDENTS AND FOR ETHNIC GROUPS, WITH IQ HELD CONSTANT

COMPARISON	GROUP	Number	IQ	Adjusted Mean Gain VOCABULARY	Adjusted Mean Gain COMPREHENSION
ALL STUDENTS Grades 3 - 12	Control	676	96.6	.67	.91
	Experimental	676	92.5	1.10**	.97
ALL ANGLOS Grades 3 - 12	Control	336	99.5	.84	1.14*
	Experimental	336	95.5	1.12**	.87
ALL INDIANS Grades 3 -12	Control	110	91.7	.41	.70
	Experimental	110	86.4	.89**	.96
ALL NEGROES Grades 3 - 12	Control	44	92.5	.50	.73
	Experimental	44	87.8	1.52**	1.12
ALL SPANISH-SURNAMED AMER. Grades 3 - 12	Control	186	95.1	.58	.64
	Experimental	186	91.8	1.07**	1.12**

[1]Achievement gain is expressed in years and months of grade placement growth between pre and post-tests; 1.20 indicates 1 year 2 months of achievement gain.

** Significant at the .01 level

* Significant at the .05 level

TABLE #2

COMPARISON OF MEAN ACHIEVEMENT GAINS BY GRADE WITH IQ HELD CONSTANT

COMPARISON (grade)	GROUP	NUMBER	IQ	Adjusted Mean Gain VOCABULARY	Adjusted Mean Gain COMPREHENSION
GRADE 3	Control	86	97.8	.96	1.22
	Experimental	89	95.7	1.15	1.00
GRADE 4	Control	113	98.0	.72	1.10
	Experimental	118	93.6	.90	.86
GRADE 5	Control	105	98.1	.68	1.09
	Experimental	117	91.5	1.08**	1.15
GRADE 6	Control	95	102.1	.94	1.09
	Experimental	100	92.5	1.10	1.72**
GRADE 7	Control	89	96.3	.84	1.16
	Experimental	114	92.8	.85	1.13
GRADE 8	Control	94	94.3	.10	1.29
	Experimental	102	88.7	1.58**	.88
GRADE 9	Control	53	90.4	.27	.87
	Experimental	46	89.3	1.46**	1.70*
GRADE 10	Control	42	88.8	.36	- .76
	Experimental	42	87.2	.89	- .27
GRADE 11	Control	31	95.5	1.08	- .89
	Experimental	43	95.0	1.16	- .28
GRADE 12	Control	12	96.6	.37	- .42
	Experimental	39	93.6	1.33	- .07

** Significant at the .01 level
* Significant at the .05 level

TABLE #3

COMPARISON OF MEAN ACHIEVEMENT GAINS BY SCHOOL WITH IQ HELD CONSTANT

COMPARISON (School)	GROUP	NUMBER	Adjusted Mean Gain VOCABULARY	Adjusted Mean Gain COMPREHENSION
CHRISTENSEN	Control	22	.26	.55
	Experimental	27	1.28	1.11
EMERSON	Control	22	.52	1.28
	Experimental	35	1.62**	1.61
KINSEY	Control	66	.56	1.27
	Experimental	90	1.65**	1.43
LEUPP (1 day a week)	Control	19	.74	1.10
	Experimental	25	.56	1.05
MARSHALL	Control	60	.81	1.26
	Experimental	59	.81	1.26
MT. ELDEN	Control	99	.89	.95
	Experimental	94	1.05	1.23
SOUTH BEAVER	Control	18	.68	.50
	Experimental	30	.46	.63
THOMAS	Control	46	1.20	1.50**
	Experimental	46	.86	.74
EAST FLAGSTAFF JUNIOR HIGH	Control	99	.68	1.06
	Experimental	119	.67	.75
FLAGSTAFF JUNIOR HIGH	Control	85	.00	1.17
	Experimental	84	2.04**	1.38
COCONINO HIGH SCHOOL	Control	48	.26	-1.41
	Experimental	64	.66	-1.11
FLAGSTAFF HIGH SCHOOL	Control	37	1.05	- .08
	Experimental	60	1.65	.86**
NATIVITY (Parochial)	Control	17	.76	1.41
	Experimental	19	1.76*	2.29*
[1]SECHRIST	Control	35	.66	.99
	Experimental	31	.77	1.24
[1]WEITZEL	Control	50	1.00	1.30*
	Experimental	31	.44	.89

** Significant at the .01 level
* Significant at the .05 level

[1] Schools not eligible for participating in Title I, under 89-10

SUMMARY OF TESTS ADMINISTERED TO REMEDIAL READING STUDENTS, 1969-1970

Remedial Reading Enrollment	School	Audio-meter	Tele-binolcular	Gilmore Oral	Gates	Dolch List	Roswell Chall	IQ
37	Christensen	38	31	60	83	50	38	
54	Emerson	33	21	35	54	24	21	7
96	Kinsey	55	43	97	370	96	96	144
	Leupp		31	31	31	31	31	31
64	Marshall	65	37	87	160	65	80	160
102	Mt. Elden	50	35	66	132	51	51	38
	+Nativity	15	16	21	47	14	10	7
33	South Beaver	39	29	39	39	32	39	19
69	Thomas	70	70	96	150	70	96	8
131	East Flagstaff Jr. High	126	82	147	140	12	12	65
63	Flagstaff Jr. High	60	17	60	60			
61	Coconino High School	56	20	85	19	2	11	15
61	Flagstaff High School	64	40	64	64		15	4
35	*Sechrist	32	22	45	62	36	23	17
32	*Weitzel	29	20	57	111	32	17	10
838	Totals	732	514	990	1,522	515	540	525

* Schools not eligible for participation under 89-10, Title I funding

+ Parochial School

STATE ANNUAL EVALUATION REPORT
PUBLIC LAW 89-313 AMENDED TO ESEA TITLE I

Projects for Handicapped Children in Schools
Supported or Operated by State Agencies

There were five institutions for handicapped children that were granted Title I funds for FY 70. These institutions are listed in the table below with location, number of participants, expenditures, and expenditure per participant.

Institution	Location	Number of Participants	Expenditures Title I Funds	Expenditure per Participant
Arizona Children's Colony	Coolidge	465	$ 126,303	$ 271
Arizona State School for Deaf and Blind	Tucson	450	118,333	262
Arizona State Hospital	Phoenix	64	19,620	306
Crippled Children's Hospital	Phoenix	58	17,781	306
Tuberculosis Sanitorium	Phoenix	30	9,197	306

Program descriptions and activities are as follows:

Arizona Children's Colony

Effective March, 1967 the Arizona Children's Colony legally became a community center empowered to develop contractual agreements with local agencies to provide day care services. Presently there are fifteen handicapped day students who are incorporated into our Title I Project. These students are all from Pinal County, and its County Superintendent of Education has provided both a teacher and coordinator to assist in their programming. A definite increase in enrollment of day students is anticipated this coming year. The coordination of staff and services with the Pima County Department of Education has been an important step in broadening the base of quality services offered the mentally retarded.

The funding of the 1969-70 project was paramount to the earlier program service investments under Title I, PL 89-313. A new administration (Superintendent and Coordinator of Services) placed the transfer of at least half of the Title I staff into permanent state positions as a priority legislative request. The lack of this action (request was made but not of priority rating) as well as the 10% reduction in the Title I allocation has limited the degree of new project activities.

Ironically, the Colony is faced with a double bind regarding education and training activities. There continues to be an increase in the more serious retarded, multiple handicapped entering the programs, thus, a tremendous need for increase staff ratio, specialized equipment/educational techniques and broad based "experiences of living." However, there are approximately one hundred residents who are capable of returning to their home communities as semi-independent/ independent contributors. The need for different kinds of training/rehabilitative services must also be met for these residents.

Arizona State School For Deaf And Blind

The deaf students and visually handicapped students are severely educationally handicapped by their physical disabilities. In addition, many of these students have other handicaps of emotional problems, mental retardation, and undiagnosed learning and behavioral problems. As a result of these additional handicaps these students are unable to benefit fully from the educational program offered. They frequently are retarding the progress of other students. A great need to improve the educational and vocational opportunities for these and other children enrolled is a sound evaluation of psychological counseling program. Such a program would aid in the proper class placement and educational management of such children to the benefit of all students enrolled. The educational and vocational programs offered would then be more effective.

These multiple handicapped students, unless they can receive psychological counseling, will soon present greater problems which will become increasingly difficult to treat or to effect improvement. To meet the above needs a full-time psychologist would be employed for the school year.

ARIZONA STATE HOSPITAL

The Grant is written to include all children up to the age of twenty-one, who have been admitted, voluntarily, or through the courts, to the Arizona State Hospital.

The objective of the educational program is to assist the patient to return to normal society. Consistent efforts are made to maintain and improve the educational levels of the individual patient and to stress the importance of continuing education. The thrust is toward a highly structured educational program in which the teacher acts as a member of the primary treatment team. The educational program is thus integrated with the treatment program for each individual child.

Evaluation is an on-going operation starting with a pre-test to determine the educational level of the individual upon original contact with the program. Other measuring devices are utilized as pre-tests, evaluations of progress and post-tests as circumstances dictate. Among these other measuring devices are: Wide Range Achievement Test, the California Achievement Test and similar devices. In addition, we have made extensive use of educational diagnostic instruments such as the Slosson Intelligence Test, the Peabody Picture Vocabulary Test, the Gray Oral Reading Test, the Classroom Reading Inventory and where indicated, the Frostig Developmental Test of Visual Perception, the Gates-Mc Killop Reading Diagnostic Test, the Spoche Reading Scales, the Wepman Auditory Descrimination

Test, the Horst Reversal Test, the Vinelan Maturity Scale and the Harris Test of Lateral Dominence. In all cases, the final evaluation criterion is the patient's ability to return to society. Tests are administered by seven teachers who have received special training in the administration and evaluation of specific tests for which they are responsible. The tests are all directly related to objectives of maintaining and improving the educational levels of students since they are either diagnostic instruments designed to uncover causes of learning problems or "yard sticks" to measure improvements in educational levels.

CRIPPLED CHILDREN'S HOSPITAL

This project will be mainly utilized to continue and expand the on-going program principally during the summer months for hospital confined children. Activities will include reinforcement of academic skills, development of perceptual ability and audio-visual experiences which because of their confinement and handicap these children are deprived. Recreational activities to relieve the monotony of the confinement will be an important part of this program. These programs are not a duplication of any other but an expansion of the total program provided in the educational setting.

Evaluation will be on an on-going basis by supervision of state consultants, nursing supervisors and the hospital medical directors. No particular tests will be utilized. It is hoped that in the short stay in the hospital we reinforce some learning skills, build a better experience and information background and offer opportunities in cultural and recreational activities not previously available to these children. Information on new teaching methods and instructional materials and equipment will be evaluated in terms of utilization during the academic year program.

TUBERCULOSIS SANITORIUM

This project will be used to expand the school year program principally during the summer months for children confined to the hospital. Deprivation, due to the lack of environmental stimuli in the hospital, is to be eliminated or reduced appreciably by providing visual and auditory perceptual experiences for preschool and primary children which will facilitate the school program in the hospital or the public schools after they leave the hospital. Academic experiences will be reinforced and expanded throughout the summer program to facilitate the retention of learned material and expansion of each child's potential. This program will maintain a recreational program which will be integrated to support the emotional attitude and mental health of the children during their confinement. This is an expansion of the educational program to improve the educational value of the current school year program and it will duplicate no services or programs.

Children participating in this program must be confined to the Tuberculosis Sanitorium Hospital for medical treatment.

Objectives of this program and the expected changes:

1. Improve non-verbal functioning through perceptional experiences. The expected change will be an improvement in academic growth.

2. To improve children's verbal functioning. The expected change will be improved communication for the child with his peers, teachers and hospital personnel.

3. Improve student expectations of success in the school. The expected change will be improved attitude and motivation toward the learning process.

4. A remedial approach will be used in the areas of deficiencies for each child. The expected change will be improvement in their deficient subjects and the child working nearer, up to or beyond his grade expectance.

5. Integration of recreational facilities. The expected change will be improved mental and physical health of the child during confinement to the hospital.

Non-obtrusive methods of evaluation will be incorporated in order to evaluate the progress of the children. This will be done by state consultants, teachers, and hospital staff at the Tuberculosis Sanitorium Hospital School.

There were three institutions for neglected and delinquent children that were granted Title I funds for FY 70. These institutions are listed in the table below with location, number of participants, expenditures, and expenditure per participant.

Institution	Location	Number of Participants	Expenditures Title I Funds	Expenditure per Participant
Arizona State Industrial School	Fort Grant	456	$ 88,939	$ 195
Arizona Youth Center	Tucson	152	23,580	155
Good Shepherd School for Girls	Phoenix	200	58,186	290

Program descriptions and activities are as follows:

ARIZONA STATE INDUSTRIAL SCHOOL

Standardized testing, teacher-made tests and group evaluation indicate that most institutionalized children categorically fall well below accepted norms for academic achievement and character development.

Utilization of the California test battery, the Kuder interest test and the general aptitude test battery substantiate the hypothesis that students who are repeated failures desperately need a more conducivee atmosphere for learning. This atmosphere is extremely difficult to establish in the normal classroom situation, due to the magnitude and divergency of problems present in an overcrowded setting.

Past performance records within the school indicate that reduction of class size and teacher saturation promotes academic achievement through personal contact.

Tests indicate a severe deficit in the areas of mathematics, reading, social studies, physical fitness and water safety. We are including music as an enrichment program.

The program will provide further development of an audio-visual center, conducting a specialized music, remedial reading, remedial math, corrective physical education, water safety and social studies workshop. Counseling and guidance service with follow-up placement of students in the vocational section will also be provided.

All students, except in rare circumstances, from grades one through eight will be required to attend. Others will be selected on a voluntary basis or by recognized need on an individual basis.

ARIZONA YOUTH CENTER

All the students attending this institution's school have been adjudicated by the Court as being delinquent and have been remanded to the Arizona Youth Center.

Results of educational evaluations (utilizing standardized tests, informal reading inventories, personal interviews, public school records, and personal observations) show that the majority of our students are deficient in the communicative arts area in general and reading in particular; exhibit a large discrepancy between their potential and actual reading achievement; have negative attitudes toward school generally and reading specifically; and have a desperate need for improvement of self-image.

To raise these students' level of educational attainment and to help prepare them to compete in the public school classroom, special educational assistance is needed. This proposed program would provide concentrated diagnosis and instruction in the reading skills in which these students are individually deficient. The program will also afford the opportunity to incorporate needed additional methods, materials, and equipment into the existing program as developed this past year.

The goal of the program is to upgrade the reading proficiencies of these students, while, hopefully, altering their attitudes toward self and school. These students need to acquire or improve the following reading abilities: word recognition skills; vocabulary (basic, general, and technical; accurate comprehension, selective and critical reading ability; ability to interpret, appreciate, and enjoy literature; ability to apply ideas gained in reading to personal and social problems and to their own personality and character development.

GOOD SHEPHERD SCHOOL FOR GIRLS

All of these children have been adjudicated delinquent. It is evidenced from existing social studies, psychological and other testing, these children have personally suffered many failures. Could it be our accepted value system has little or no relevancy, morally or mentally or spiritually, to the purpose of life as it is viewed by these students?

Their problems have arisen from many contributing factors in the home, community, and the school. Many of them have failed to find intellectual stimuli in the schools and are unable to relate subjects to their present or future needs or pleasure.

Physical fitness programs are recognized as vital to all vouth. Such programs take on a deeper significance and constitute a more urgent need for the delinquent adolescent whose pattern of living, due to her delinquency or unmanageability, more often than not, is characterized by irregular hours, consumption of deleterious beverages or drugs, poor dietary habits resulting in malnutrition, limited physical exercise and general neglect of preventative dental or medical care.

It is further hypothesized by staff that unwholesome or antisocial interests cannot be eliminated by any means other than a positive aggressive attempt to substitute and to encourage the student to cultivate wholesome, constructive interests.

Goals and objectives are to improve and maintain physical fitness of these adolescent girls; develop a healthy sense of competition compatible with high principles, fairness, integrity, perseverance and motivation for achievement; develop a wholesome set of interests and activities to replace delinquent prone activities both in active participation in sports and recreational interest in spectator sports; conduct such activities in strict accord with standard rules of competition (Power games) to develop alert and attentive mental activity by students throughout play and create a knowledgeable awareness of professional and amateur sports events at spectator level.